# CV PROF. LORENZO FLORI

## EDUCATION AND TRAINING

**Tenure Track Researcher (RTT)** **2025 – present**

Tenure Track Researcher (RTT) in Pharmacology (BIOS-11/A, formerly known as SSD BIO/14) at UniCamillus – Saint Camillus International University of Health and Medical Sciences, Rome, Italy, since 01/07/2026 (CURRENT POSITION).

**Abilitazione scientifica nazionale (ASN)** **2025**

National scientific qualification for the role of Associate Professor in the academic field 05/G1 "Pharmacology, Clinical Pharmacology and Pharmacognosy" (GSD BIOS-11A, formerly known as SSD BIO/14), from 29/10/2025 to 29/10/2037.

**Postgraduate School of Hospital Pharmacy (SSFO)** **2023 - present**

Third-year resident in Hospital Pharmacy (non-medical area)

**Postdoctoral Research** **2023 - 2026**

- Research Fellow at the Department of Pharmacy, University of Pisa (08/10/2025 – 30/10/2026). Research project: "Sulfur compounds and transsulfuration pathway in diabetic vascular injury: role, players and pharmacological modulation". Funded by the National Research Programme and Projects of National Interest (PRIN) – PRIN 2022.
  Supervisor: Prof. Vincenzo Calderone.
- Research Fellow at the Department of Pharmacy, University of Pisa (08/02/2025 – 07/10/2025). Research project: "Sulfur compounds and transsulfuration pathway in diabetic vascular injury: role, players and pharmacological modulation". Funded by the National Research Programme and Projects of National Interest (PRIN) – PRIN 2022.
  Supervisor: Prof. Vincenzo Calderone.
- Research Fellow at the Department of Pharmacy, University of Pisa (08/02/2024 – 07/02/2025). Research project: "Hydrogen sulfide releasing isothiocyanates as ferroptosis inhibitors for prevention of cardiovascular diseases". Funded by the National Research Programme and Projects of National Interest (PRIN) – PRIN 2022.
  Supervisor: Prof. Valentina Citi.
- Research Fellow at the Department of Pharmacy, University of Pisa (08/02/2023 – 07/02/2024). Research project: "BIORAS_SHRIMP – Improvement and innovation of a BIOsecure Recirculating Aquaculture System for SHRIMP and additional biomass circular production".
  Supervisor: Prof. Paola Nieri.

**PhD in Pharmaceutical Sciences and Bioactive Compounds** **2019 - 2023**

PhD in Pharmacology at the Department of Pharmacy, University of Pisa.
Thesis title: "Inflamm-aging: Pharmacological modulation of the '$H_2S$ system' for the treatment of age-related cardiovascular disorders" (GSD BIOS-11A, formerly known as SSD BIO/14).
Supervisor: Prof. Vincenzo Calderone.
PhD awarded on: 31/05/2023.

**Visiting PhD student** **2022**

Research activity carried out at UCSF's Department of Bioengineering and Therapeutic Sciences, San Francisco, CA, USA – Savic Lab (01/06/2022 – 30/11/2022).
Project title: "Evaluation of the efficacy and safety of two new short-course regimens with the goal of identifying optimal treatment strategies for drug-sensitive tuberculosis".
Supervisor: Prof. Rada Savic.

**CERSI Immersion Course in Drug Discovery, Drug Development, and Regulation** **2022**
Training course (16/09/2022 – 02/12/2022) at the UCSF-Stanford Center of Excellence in Regulatory Science and Innovation (UCSF-Stanford CERSI).

**PhD+ training course** **2020**
Training programme aimed at promoting the acquisition of knowledge on business models and economic-financial management within the different application fields of the PhD programme (14/01/2020 – 13/02/2020), organized by the University of Pisa, Scuola Normale Superiore, Scuola Superiore Sant'Anna, and IMT School for Advanced Studies Lucca.

**Certification of 24 CFU for admission to FIT (Formazione Iniziale Tirocinio)** **2020**
University credits acquired in the fields of anthropological, psychological, pedagogical sciences and teaching methodologies. Qualification obtained on: 07/09/2020.

**Training Course "Protection of animals used for research purposes"** **2019**
22 October, Palazzo della Sapienza, Pisa – University of Pisa (Animal Welfare Body).

**Research Fellowship** **2018 - 2019**
Research Fellowship at the Department of Pharmacy and the Department of Agricultural, Food and Agro-Environmental Sciences, University of Pisa (15/12/2018 – 31/10/2019).
Project title: "VALE Project – Valorization of agro-food by-products for the production of olive oil with enhanced nutraceutical value". Project co-financed by Tuscany POR FESR 2014–2020.
Tutors: Prof. Francesca Venturi and Prof. Lara Testai.

**Training Course "Protection of animals used for research purposes"** **2018**
5–6 November, Polo Le Benedettine, Pisa – University of Pisa (Animal Welfare Body).

**Postgraduate Training Internship** **2018**
Postgraduate training internship at the Department of Pharmacy, University of Pisa (01/10/2018-14/12/2018).
Project title: "Evaluation of the effects of novel controlled-release calcium formulations on bone health under osteopenia and osteoporosis conditions".
Tutors: Prof. Lara Testai and Prof. Ylenia Zambito.

**Professional Qualification as Pharmacist** **2018**
Qualification to practice as a Pharmacist. Qualification obtained: June 2018.

**Master's Degree in Pharmacy** **2018**
Master's Degree in Pharmacy at the Department of Pharmacy, University of Pisa, with an experimental thesis in pharmacology.
Thesis title: "Evaluation of the cardioprotective profile of a novel $H_2S$-releasing isothiocyanate donor in an ex vivo experimental model of myocardial ischemia/reperfusion injury".
Supervisors: Prof. Vincenzo Calderone, Prof. Lara Testai, and Prof. Valentina Citi.
Degree awarded on: 08/06/2018.
Final grade: 110/110 cum laude.

## LANGUAGE SKILLS

Native language: Italian.
Foreign language: English.
- Reading: **C1** level – Advanced
- Writing: **C1** level – Advanced
- Speaking: **C1** level – Advanced
- Listening: **C1** level – Advanced

**C1 level course** **2020**
CLI - Language Center of the University of Pisa.
"English for Research Publication and Presentation Purposes".

**C1_PLUS level course** **2020**
CLI - Language Center of the University of Pisa.
“English for Research Publication and Presentation Purposes”.

## IT SKILLS

**ECDL Certification** **2012**
Italian Association for Informatics and Automatic Computing (AICA).

Specific software skills: GraphPad Prism, AcqKnowledge, GIMP, ImageJ, ChemDraw, R, RStudio, PsN, NONMEM, Pirana.

## BOOK CHAPTERS

1. **Flori L**, Spezzini J, Piragine E, Citi V, Calderone V, Martelli A. Naturally Occurring $H_2S$-Donors in Vascular Diseases. Handb Exp Pharmacol. 2025 Oct 8. doi: 10.1007/164_2025_753. Epub ahead of print. PMID: 41057731.

## PUBLICATIONS

1. **Flori L,** Spezzini J, Benedetti G, Pagnotta E, Lazzarini G, Conte G, Miragliotta V, Del Debbio F, Martelli A, Mannelli LDC, Da Pozzo E, Vellecco V, Bucci M, Casale V, Righetti L, Ghelardini C, Testai L, Calderone V. Glucoerucin, Glucosinolate From Brassicaceae Vegetables, Improves the Metabolic Profile in a Murine Model of Diet-Induced Obesity. Phytother Res. 2026 May 11. doi: 10.1002/ptr.70359. Epub ahead of print. PMID: 42116212.
2. **Flori L**, Ramos-Molina B, Calderone V, Martelli A. Editorial: Targeting adipose tissue for the treatment of metabolic alterations. Front Pharmacol. 2026 Feb 11;17:1797423. doi: 10.3389/fphar.2026.1797423. PMID: 41756232; PMCID: PMC12932446.
3. **Flori L**, Squarzanti DF, Lo Re M, Malfa P, Martelli A, Calderone V. Microbiota-Mediated Crosstalk Between the Gut and the Vascular System: Protective Effects of Novel Postbiotic Formulations on Human Endothelial and Vascular Smooth Muscle Cells. Int J Mol Sci. 2026 Jan 20;27(2):1011. doi: 10.3390/ijms27021011. PMID: 41596655; PMCID: PMC12842148.
4. Lazzarini G, **Flori L**, Pirone A, Giannessi E, Testai L, Calderone V, Miragliotta V. Histological methods to quantify changes of white and brown adipose tissue in response to a high content fat diet in mice. Ann Anat. 2026 Jan;263:152738. doi: 10.1016/j.aanat.2025.152738. Epub 2025 Sep 20. PMID: 40983144.
5. **Flori L**, Calderone V, Testai L. Emerging role of the cardiac lipidome in the progression of heart failure. Biomed Pharmacother. 2025 Sep;190:118385. doi: 10.1016/j.biopha.2025.118385. Epub 2025 Aug 2. PMID: 40753938.
6. **Flori L**, Veneziano S, Martelli A, Piragine E, Calderone V. Transsulfuration Pathway Products and H2S-Donors in Hyperhomocysteinemia: Potential Strategies Beyond Folic Acid. Int J Mol Sci. 2025; Jul 3;26(13):6430. doi: 10.3390/ijms26136430. PMID: 40650206.
7. **Flori L**, Galgani G, Bray G, Ippolito C, Segnani C, Pellegrini C, Citi V, Bernardini N, Martelli A, Calderone V. Development of an adipocyte differentiation protocol using 3T3-L1 cells for the investigation of the browning process: identification of the PPAR-γ agonist rosiglitazone as a browning reference drug. Front. Pharmacol. 2025; 16:1546456. doi: 10.3389/fphar.2025.1546456.
8. Ngara B, **Flori L**, van Wijk RC, Ernest JP, Tyagi S, Soni H, Hölscher C, Walter K, Dreisbach J, Hoelscher M, Nuermberger EL, Savic R. Translational modeling of BTZ-043 in predicting phase IIA efficacy and evaluating drug-drug interactions with BPaL in murine models. J Infect Dis. 2025 Feb 17:jiaf088. doi: 10.1093/infdis/jiaf088. Epub ahead of print. PMID: 39957252.
9. Usai L, Torre S, Aktay N, Dunford NT, Citi V, **Flori L**, Nieri P, Lutzu GA. Recent Advancements in Production and Extraction Methods of Phycobiliprotein C-phycocyanin by Arthrospira (Spirulina) platensis: A Mini Review. Curr Microbiol. 2024 Oct 26;81(12):428. doi: 10.1007/s00284-024-03964-7. PMID: 39460769.

10. **Flori L,** Benedetti G, Martelli A, Calderone V. Gut-vascular axis and postbiotics: The pharmacological potential of metabolites encourages broader definitions. Pharmacol Res. 2024 Oct;208:107416. doi: 10.1016/j.phrs.2024.107416. Epub 2024 Sep 12. PMID: 39276956.
11. **Flori L**, Benedetti G, Martelli A, Calderone V. Microbiota alterations associated with vascular diseases: postbiotics as a next-generation magic bullet for gut-vascular axis. Pharmacol Res. 2024 Sep;207:107334. doi: 10.1016/j.phrs.2024.107334. Epub 2024 Aug 3. PMID: 39103131.
12. Piragine E, De Felice M, Germelli L, Brinkmann V, **Flori L**, Martini C, Calderone V, Ventura N, Da Pozzo E, Testai L. The Citrus flavanone naringenin prolongs the lifespan in C. elegans and slows signs of brain aging in mice. Exp Gerontol. 2024 Sep;194:112495. doi: 10.1016/j.exger.2024.112495. Epub 2024 Jun 18. PMID: 38897393.
13. Citi V, Torre S, **Flori L**, Usai L, Aktay N, Dunford NT, Lutzu GA, Nieri P. Nutraceutical Features of the Phycobiliprotein C-Phycocyanin: Evidence from Arthrospira platensis (Spirulina). Nutrients. 2024 Jun 3;16(11):1752. doi: 10.3390/nu16111752. PMID: 38892686; PMCID: PMC11174898.
14. **Flori L**, Benedetti G, Calderone V, Testai L. Hydrogen Sulfide and Irisin, Potential Allies in Ensuring Cardiovascular Health. Antioxidants (Basel). 2024 Apr 28;13(5):543. doi: 10.3390/antiox13050543. PMID: 38790648; PMCID: PMC11118251.
15. **Flori L**, Lazzarini G, Spezzini J, Pirone A, Calderone V, Testai L, Miragliotta V. The isoproterenol-induced myocardial fibrosis: A biochemical and histological investigation. Biomed Pharmacother. 2024 Apr 1;174:116534. doi: 10.1016/j.biopha.2024.116534. Epub ahead of print. PMID: 38565062.
16. Spezzini J, Piragine E, **Flori L**, Calderone V, Martelli A. Natural H2S-donors: A new pharmacological opportunity for the management of overweight and obesity. Phytother Res. 2024 Mar 2. doi: 10.1002/ptr.8181. Epub ahead of print. PMID: 38430052.
17. **Flori L**, Spezzini J, Calderone V, Testai L. Role of mitochondrial potassium channels in ageing. Mitochondrion. 2024 Feb 24;76:101857. doi: 10.1016/j.mito.2024.101857. Epub ahead of print. PMID: 38403095.
18. Benedetti G, **Flori L**, Spezzini J, Miragliotta V, Lazzarini G, Pirone A, Meneguzzo C, Tagliavento L, Martelli A, Antonelli M, Donelli D, Faraloni C, Calderone V, Meneguzzo F, Testai L. Improved Cardiovascular Effects of a Novel Pomegranate Byproduct Extract Obtained through Hydrodynamic Cavitation. Nutrients. 2024 Feb 10;16(4):506. doi: 10.3390/nu16040506. PMID: 38398831.
19. **Flori L**, Piragine E, Calderone V, Testai L. Role of hydrogen sulfide in the regulation of lipid metabolism: Implications on cardiovascular health. Life Sci. 2024 Mar 15;341:122491. doi: 10.1016/j.lfs.2024.122491. Epub 2024 Feb 8. PMID: 38336275.
20. Brogi S, Guarino I, **Flori L**, Sirous H, Calderone V. In Silico Identification of Natural Products and World-Approved Drugs Targeting the KEAP1/NRF2 Pathway Endowed with Potential Antioxidant Profile. Computation. 2023 Dec 16;11(12):255. doi:10.3390/computation11120255.
21. **Flori L**, Montanaro R, Pagnotta E, Ugolini L, Righetti L, Martelli A, Di Cesare Mannelli L, Ghelardini C, Brancaleone V, Testai L, Calderone V. Erucin Exerts Cardioprotective Effects on Ischemia/Reperfusion Injury through the Modulation of mitoKATP Channels. Biomedicines. 2023 Dec 12;11(12):3281. doi: 10.3390/biomedicines11123281. PMID: 38137502.
22. Testai L, Montanaro R, **Flori L**, Pagnotta E, Vellecco V, Gorica E, Ugolini L, Righetti L, Brancaleone V, Bucci M, Piragine E, Martelli A, Di Cesare Mannelli L, Ghelardini C, Calderone V. Persulfidation of mitoKv7.4 channels contributes to the cardioprotective effects of the $H_2S$-donor Erucin against ischemia/reperfusion injury. Biochem Pharmacol. 2023 Sep;215:115728. doi: 10.1016/j.bcp.2023.115728. Epub 2023 Jul 29. PMID: 37524208.
23. Benvenuti L, D'Antongiovanni V, Pellegrini C, Fornai M, Bernardini N, Ippolito C, Segnani C, Di Salvo C, Colucci R, Martelli A, **Flori L**, Calderone V, Carta G, Ghelardi E, Calvigioni M, Panattoni A, Coppolecchia R, Arini A, Antonioli L. Dietary Supplementation with the Probiotic SF68 Reinforces Intestinal Epithelial Barrier in Obese Mice by Improving Butyrate Bioavailability. Mol Nutr Food Res. 2023 Jul;67(13):e2200442. doi: 10.1002/mnfr.202200442. Epub 2023 May 16. PMID: 37099449.
24. **Flori L**, Piragine E, Spezzini J, Citi V, Calderone V, Martelli A. Influence of Polyphenols on Adipose Tissue: Sirtuins as Pivotal Players in the Browning Process. Int J Mol Sci. 2023 May 25;24(11):9276. doi: 10.3390/ijms24119276. PMID: 37298226.

25. **Flori L**, Brogi S, Sirous H, Calderone V. Disruption of Irisin Dimerization by FDA-Approved Drugs: A Computational Repurposing Approach for the Potential Treatment of Lipodystrophy Syndromes. Int J Mol Sci. 2023 Apr 20;24(8):7578. doi: 10.3390/ijms24087578. PMID: 37108741.
26. Kampa RP, **Flori L**, Sęk A, Spezzini J, Brogi S, Szewczyk A, Calderone V, Bednarczyk P, Testai L. Luteolin-Induced Activation of Mitochondrial BKCa Channels: Undisclosed Mechanism of Cytoprotection. Antioxidants (Basel). 2022 Sep 24;11(10):1892. doi: 10.3390/antiox11101892. PMID: 36290615.
27. F**lori L**, Albanese L, Calderone V, Meneguzzo F, Pagliaro M, Ciriminna R, Zabini F, Testai L. Cardioprotective Effects of Grapefruit IntegroPectin Extracted via Hydrodynamic Cavitation from By-Products of Citrus Fruits Industry: Role of Mitochondrial Potassium Channels. Foods. 2022 Sep 11;11(18):2799. doi: 10.3390/foods11182799. PMID: 36140927.
28. Micheli L, Testai L, Angeli A, Carrino D, Pacini A, Margiotta F, **Flori L**, Supuran CT, Calderone V, Ghelardini C, Di Cesare Mannelli L. Inhibitors of Mitochondrial Human Carbonic Anhydrases VA and VB as a Therapeutic Strategy against Paclitaxel-Induced Neuropathic Pain in Mice. Int J Mol Sci. 2022 Jun 2;23(11):6229. doi: 10.3390/ijms23116229. PMID: 35682907.
29. Testai L, Pagnotta E, Piragine E, **Flori L**, Citi V, Martelli A, Mannelli LDC, Ghelardini C, Matteo R, Suriano S, Troccoli A, Pecchioni N, Calderone V. Cardiovascular benefits of Eruca sativa mill. Defatted seed meal extract: Potential role of hydrogen sulfide. Phytother Res. 2022 Apr 27. doi: 10.1002/ptr.7479. Epub ahead of print. PMID: 35478197.
30. Bononi G, **Flori L**, Citi V, Acciai C, Nocilla V, Martelli A, Poli G, Tuccinardi T, Granchi C, Testai L, Calderone V, Minutolo F. New Synthetic Analogues of Natural Polyphenols as Sirtuin 1-Activating Compounds. Pharmaceuticals (Basel). 2022 Mar 10;15(3):339. PMID: 35337137.
31. **Flori L**, Petrarolo G, Brogi S, La Motta C, Testai L, Calderone V. Identification of novel SIRT1 activators endowed with cardioprotective profile. Eur J Pharm Sci. 2021 Oct 1; 165:105930. PMID: 34265406.
32. D'Antongiovanni V, Pellegrini C, Antonioli L, Benvenuti L, Di Salvo C, **Flori L**, Piccarducci R, Daniele S, Martelli A, Calderone V, Martini C, Fornai M. Palmitoylethanolamide Counteracts Enteric Inflammation and Bowel Motor Dysfunctions in a Mouse Model of Alzheimer's Disease. Front Pharmacol. 2021 Sep 29; 12:748021. PMID: 34658885.
33. Testai L, De Leo M, **Flori L**, Polini B, Braca A, Nieri P, Pistelli L, Calderone V. Contribution of irisin pathway in protective effects of mandarin juice (Citrus reticulata Blanco) on metabolic syndrome in rats fed with high fat diet. Phytother Res. 2021 Aug; 35(8):4324-4333. PMID: 33942395.
34. Testai L, Brancaleone V, **Flori L**, Montanaro R, Calderone V. Modulation of EndMT by Hydrogen Sulfide in the Prevention of Cardiovascular Fibrosis. Antioxidants (Basel). 2021 Jun 3; 10(6):910. PMID: 34205197.
35. Testai L, Martelli A, **Flori L**, Cicero AFG, Colletti A. Coenzyme Q10: Clinical Applications beyond Cardiovascular Diseases. Nutrients. 2021 May 17; 13(5):1697. PMID: 34067632.
36. Martelli A, **Flori L**, Gorica E, Piragine E, Saviano A, Annunziata G, Di Minno MND, Ciampaglia R, Calcaterra I, Maione F, Tenore GC, Novellino E, Calderone V. Vascular Effects of the Polyphenolic Nutraceutical Supplement Taurisolo®: Focus on the Protection of the Endothelial Function. Nutrients. 2021 May 2; 13(5):1540. PMID: 34063322.
37. Citi V, Corvino A, Fiorino F, Frecentese F, Magli E, Perissutti E, Santagada V, Brogi S, **Flori L**, Gorica E, Testai L, Martelli A, Calderone V, Caliendo G, Severino B. Structure-activity relationships study of isothiocyanates for $H_2S$ releasing properties: 3-Pyridyl-isothiocyanate as a new promising cardioprotective agent. J Adv Res. 2021 Mar 3; 27:41-53. PMID: 33318865.
38. Testai L, Sestito S, Martelli A, Gorica E, **Flori L**, Calderone V, Rapposelli S. Synthesis and pharmacological characterization of mitochondrial $K_{ATP}$ channel openers with enhanced mitochondriotropic effects. Bioorg Chem. 2021 Feb; 107:104572. PMID: 33418316.
39. **Flori L**, Testai L, Calderone V. The "irisin system": From biological roles to pharmacological and nutraceutical perspectives. Life Sci. 2021 Feb 15; 267:118954. PMID: 33359670.
40. Macaluso M, Bianchi A, Sanmartin C, Taglieri I, Venturi F, Testai L, **Flori L**, Calderone V, De Leo M, Braca A, Ciccone V, Donnini S, Guidi L, Zinnai A. By-Products from Winemaking and Olive Mill Value Chains for the Enrichment of Refined Olive Oil: Technological Challenges and Nutraceutical Features. Foods. 2020 Oct 1; 9(10):1390. PMID: 33019655.

41. **Flori L**, Macaluso M, Taglieri I, Sanmartin C, Sgherri C, Leo M, Ciccone V, Donnini S, Venturi F, Pistelli L, Martelli A, Calderone V, Testai L, Zinnai A. Development of Fortified Citrus Olive Oils: From Their Production to Their Nutraceutical Properties on the Cardiovascular System. Nutrients. 2020 May 27; 12(6):1557. PMID: 32471156.
42. Pellegrini C, Daniele S, Antonioli L, Benvenuti L, D'Antongiovanni V, Piccarducci R, Pietrobono D, Citi V, Piragine E, **Flori L**, Ippolito C, Segnani C, Palazon-Riquelme P, Lopez-Castejon G, Martelli A, Colucci R, Bernardini N, Trincavelli ML, Calderone V, Martini C, Blandizzi C, Fornai M. Prodromal Intestinal Events in Alzheimer's Disease (AD): Colonic Dysmotility and Inflammation Are Associated with Enteric AD-Related Protein Deposition. Int J Mol Sci. 2020 May 15; 21(10):3523. PMID: 32429301.
43. Piragine E, **Flori L**, Di Cesare Mannelli L, Ghelardini C, Pagnotta E, Matteo R, Lazzeri L, Martelli A, Miragliotta V, Pirone A, Testai L, Calderone V. Eruca sativa Mill. seed extract promotes anti-obesity and hypoglycemic effects in mice fed with a high-fat diet. Phytother Res. 2020 Apr; 35(4):1983-1990. PMID: 33141966.
44. Testai L, Piragine E, Piano I, **Flori L**, Da Pozzo E, Miragliotta V, Pirone A, Citi V, Di Cesare Mannelli L, Brogi S, Carpi S, Martelli A, Nieri P, Martini C, Ghelardini C, Gargini C, Calderone V. The Citrus Flavonoid Naringenin Protects the Myocardium from Ageing-Dependent Dysfunction: Potential Role of SIRT1. Oxid Med Cell Longev. 2020 Jan 25; 2020:4650207. PMID: 32047577.
45. Fabiano A, Piras AM, Calderone V, Testai L, **Flori L**, Puppi D, Chiellini F, Zambito Y. A New Calcium Oral Controlled-Release System Based on Zeolite for Prevention of Osteoporosis. Nutrients. 2019 Oct 15; 11(10):2467. PMID: 31618877.
46. **Flori L**, Donnini S, Calderone V, Zinnai A, Taglieri I, Venturi F, Testai L. The Nutraceutical Value of Olive Oil and Its Bioactive Constituents on the Cardiovascular System. Focusing on Main Strategies to Slow Down Its Quality Decay during Production and Storage. Nutrients. 2019 Aug 21; 11(9):1962. PMID: 31438562.

## SCORE INDEX (updated 01/07/2026)

- Scientific publications: 47
- Citations: 974
- H-index: 19
- Oral communications: 20 (including 4 invited talks)
- Scientific posters: 9

## AWARDS AND RECOGNITIONS

**Best Poster Award** **2023**

International Conference IRPES 2023 – Innovative Research in Pharmaceutical and Environmental Sciences, Pisa, Italy, 1 December 2023.

**Flori L.**, Bray G., Gorini J., Pierucci C., Ippolito C., Pellegrini C., Bernardini N., Martelli A., Calderone V. Sulforaphane and erucin, natural H2S donors as potential modulators of de-novo browning process.

**Best Oral Communication Award** **2023**

1st Intersociety Congress on Plant Products for Health: The role of medicinal plants in modern medicine. Padova, 15-17 June 2023.

**Flori L.**, Testai L., Miragliotta V., Lazzarini G., Piragine E., Citi V., Pagnotta E., Matteo R., Righetti L., Di Cesare Mannelli L., Ghelardini C., Martelli A., Calderone V. La glucoerucin, un glucosinolato contenuto in Eruca sativa Mill., previene la sindrome metabolica nei topi alimentati con una dieta ricca di grassi: modulazione della via dell'irisina e del processo di "browning".

**SIF-Egualia Research Fellowship Award** **2023**

Research fellowship awarded by the Italian Society of Pharmacology (SIF) and Egualia for scientific activities in the following research areas: Value-Added Medicines (VAMs), Drug Repurposing, and Biosimilar Medicines.

The fellowship was awarded based on the scientific work entitled: “Disruption of Irisin Dimerization by FDA Approved Drugs: A Computational Repurposing Approach for the Potential Treatment of Lipodystrophy Syndromes”. International Journal of Molecular Sciences, 2023 Apr 20;24(8):7578.

**SIF Research Fellowship for Short-Term Research Abroad** **2022**

Research fellowship awarded by the Italian Society of Pharmacology (SIF) to support scientific activities in international research institutions.

Host institution: Department of Bioengineering and Therapeutic Sciences, San Francisco, CA, USA-Savic Lab.

Project title: Evaluation of the efficacy and safety of two new short-course regimens with the goal of identifying optimal treatment strategies for drug-sensitive tuberculosis.

**Best Oral Communication Award (Clinical Section)** **2021**

XI National Congress of SINut (Italian Society of Nutraceuticals), Bologna, Italy, 4–6 November 2021.

Flori L., Piragine E., Gorica E., Saviano A., Annunziata G., Di Minno M.N.D., Ciampaglia R., Calcaterra I., Maione F., Tenore G..C, Novellino E., Calderone V., Martelli A. Prevention of endothelial dysfunction by the polyphenolic extract Taurisol®: from preclinical to clinical.

**Best Poster Award** **2021**

40th National Congress of SIF (Italian Society of Pharmacology), e-conference, 9–13 March 2021.

Flori L., Martelli A., Piragine E., Gorica E., Tenore G.C., Novellino E., Calderone V. Vaso-protective, vasorelaxing and anti-hypertensive properties of the nutraceutical Taurisolo®.

## ESPERIENZA DI INSEGNAMENTO

**Relatore ad attività seminariali** **2026**

Participation as a speaker in the seminar for students of the Medicine and Surgery program, taught in English.

Title:"Metabolic Disorders (Obesity and Metabolic Syndrome) - Pharmacological Approaches", in data 09 gennaio 2026, presso UniCamillus Saint Camillus International University of Health and Medical Sciences via di Sant'Alessandro, 8 Rome, Italy.

**Teaching Support** **2018 - present**

- Teaching support and expert in the General Pharmacology program (BIOS-11/A, formerly BIO/14), at the Department of Pharmacy, University of Pisa; degree program in Pharmacy (2020 - present).
- Teaching support and expert in the Pharmacotherapy program (BIOS-11/A, formerly BIO/14), at the Department of Pharmacy, University of Pisa; Bachelor's Degree in Pharmacy (2020 - present).
- Teaching support and expert in the field of General Pharmacology and Pharmacotherapy I (sector BIOS-11/A, formerly BIO/14) at the Department of Pharmacy, University of Pisa; Bachelor's Degree in Pharmacy (2020 - present).
- Teaching support and expert in the field of Nutraceutics and Nutrigenomics (sector BIOS-11/A, formerly BIO/14) at the Department of Pharmacy, University of Pisa; Bachelor's Degree in Human Nutrition Sciences (2020 - present).
- Teaching support and expert in the field of Applied Pharmacology (sector BIOS-11/A, formerly BIO/14) at the Department of Pharmacy, University of Pisa; Bachelor's Degree in Pharmacy and Pharmaceutical Chemistry and Technology (2020 - present).
- Teaching assistant and subject advisor for the subject of Pharmacology, Pharmacotherapy, Pharmacognosy, and Toxicology (sector BIOS-11/A, formerly BIO/14) at the Department of Pharmacy, University of Pisa; degree program in Pharmaceutical Chemistry and Technology (2020 - present).
- Teaching assistant and subject advisor for the subject of Pathological Addictions and Pharmacology of Substances of Abuse (sector BIOS-11/A, formerly BIO/14) at the Department of Pharmacy, University of Pisa; degree program in Pharmacy (2020 - present).
- Teaching assistant and subject advisor for the subject of Pharmacognosy and Pharmaceutical Botany (sector BIOS-11/A, formerly BIO/14) at the Department of Pharmacy, University of Pisa; degree program in Pharmacy (2020 - present).
- Teaching assistant and lecturer in Pharmacovigilance and Toxicology (BIOS-11/A, formerly BIO/14) at the Department of Pharmacy, University of Pisa; degree program in Pharmacy (2020–present).

**Support for educational laboratories** **2018 - present**

- Teaching support for laboratory activities in applied pharmacology at the Department of Pharmacy, University of Pisa; degree program in Pharmacy and Pharmaceutical Chemistry and Technology (2019 - present).
- Teaching support for laboratory activities in community clinical pharmacy at the Department of Pharmacy, University of Pisa; degree program in Pharmacy and Pharmaceutical Chemistry and Technology (2023 - present).

**Thesis Advisor** **2018 - present**

- Advisor of 18 theses at the University of Pisa (13 in the master's degree program in Pharmacy and 5 in the master's degree program in Pharmaceutical Chemistry and Technology).

## AFFILIATION TO SCIENTIFIC SOCIETIES

- SIF Affiliation: Member of SIF "Società Italiana di Farmacologia" since June 20, 2021 to present.
- ASCPT Affiliation: Member of ASCPT "America Society for Clinical Pharmacology & Therapeutics" since September 12, 2022 to present.

## MANAGEMENT OR PARTICIPATION IN EDITORIAL COMMITTEES OF JOURNALS, EDITORIAL SERIES, ENCYCLOPEDIAS AND TREATISES OF RECOGNIZED PRESTIGE

- Reviewer for indexed international scientific journals: Frontiers in Pharmacology, Frontiers in Endocrinology, Biomedicine, Antioxidants, International Journal of Molecular Sciences, Pharmaceuticals (from 01-01-2021 to today).
- Topic coordinator of the international peer reviewed journal Frontiers in Pharmacology, Collection "Targeting Adipose Tissue for the Treatment of Metabolic Alterations". From 11/23/2023 to 06/30/2025. Link: https://www.frontiersin.org/research-topics/61660/targeting-adipose-tissue-for-the-treatment-ofmetabolic-alterations

## PROJECT ACTIVITIES

- Participation in the VALE Project - Valorisation of agro-food waste for the production of olive oil with increased nutraceutical value. Project co-financed by Tuscany POR FESR 2014-2020. PRIORITY AXIS 1 – Action 1.1.5. sub-action a1. The undersigned was the winner of a 12-month research grant announced for this project (PI: Prof. Francesca Venturi and Prof. Lara Testai).
- Participation in the research activities of the Research Project - Synbalance Research Contract - Department of Pharmacy, University of Pisa 2024: "Evaluation of the effect of pro- and postbiotics on vascular damage induced by dysbiosis-associated conditions" (PI: Prof. Vincenzo Calderone and Prof. Alma Martelli).
- Funding with mobility contribution for research periods abroad for doctoral students - University of Pisa (2022) and SIF research grant for short periods abroad (2022) for the carrying out of the project entitled: "Evaluation of the efficacy and safety of two new short-course regimens - identification of optimal therapeutic strategies for pharmacosensitive tuberculosis" at University of California, School of Pharmacy & Medicine, Bioengineering and Therapeutic Sciences, San Francisco, California (USA).
- Participation in the research project "Technological Demonstrators" grant of the University of Pisa (NO-DIABETES project) (PI: Prof. Vincenzo Calderone).

- Participation in the research project "Sulfur compounds and transsulfuration pathway in diabetic vascular injury: role, players, and pharmacological modulation" under the scientific direction of Prof. Vincenzo Calderone. Funding for the National Research Program and Projects of Relevant National Interest (PRIN) – PRIN 2022 Call – Project Code 2022AT7P9T. The undersigned has been awarded an 8-month research grant for this project (PI: Prof. Vincenzo Calderone).
- Participation in the research project "Hydrogen sulfide-releasing isothiocyanates as ferroptosis inhibitors for the prevention of cardiovascular diseases" under the scientific direction of Prof. Valentina Citi. Funding for the National Research Program and Projects of Relevant National Interest (PRIN) – PRIN 2022 Call – Project Code 2022N3FLP3. The undersigned has been awarded a 12-month research grant for this project (PI: Prof. Valentina Citi).
- Participation in the research project "BIORAS_SHRIMP - Improvement and innovation of a BIOsecure Recirculating Aquaculture System for SHRIMP and additional biomass circular production," funded under the "ERA-NET Cofund on Blue Economy – Unlocking the Potential of Aquatic Bioresources" call (BlueBio Consortium – H2020), under the scientific supervision of Prof. Paola Nieri. The undersigned has been awarded a 12-month research grant for this project (PI: Prof. Paola Nieri).

**Organization, direction, coordination, or participation to national and international research groups.**

- Participation in the research activity of the Pharmacology group of the Department of Pharmacy of the University of Pisa, directed by Professor Vincenzo Calderone, to conduct research projects related to cardiometabolic pharmacology. Preclinical research on in vitro and in vivo models. (From 2018 to present).
- NATIONAL COLLABORATION: Participation in the research activity with a national collaboration with the Pharmacology research group of the University of Siena, led by Professors Sandra Donnini and Lucia Morbidelli, to conduct research projects aimed at evaluating the in vivo nutraceutical effects of a high-nutritional value oil on animals fed a high-fat diet. VALE Project – Valorization of Agri-food Waste for the Production of Olive Oil with Increased Nutraceutical Value.
- NATIONAL COLLABORATION: Participation in research activities with a national collaboration with the Agricultural, Food and Agro-Environmental Sciences research group at the University of Pisa, led by Professors Angela Zinnai and Francesca Venturi, to conduct research projects aimed at evaluating the in vivo nutraceutical effects of a high-nutritional-value oil on animals fed a high-fat diet. VALE Project – Valorization of Agri-food Waste for the Production of Olive Oil with Increased Nutraceutical Value.
- NATIONAL COLLABORATION: Participation in research activities with a national collaboration with the research group at the Agriculture and Environment Research Center (CREA) in Bologna, led by Dr. Eleonora Pagnotta, to conduct research projects aimed at evaluating the cardioprotective effects of the natural isothiocyanate Erucina.
- NATIONAL COLLABORATION: Participation in research activities under a national collaboration with the Pharmaceutical Chemistry research group at the University of Pisa, led by Professor Concettina La Motta, to conduct research projects aimed at identifying novel SIRT1 activators with cardioprotective efficacy.
- NATIONAL COLLABORATION: Participation in research activities under a national collaboration with the Pharmaceutical Chemistry research group at the University of Pisa, led by Professor Filippo Minutolo, to conduct research projects aimed at identifying novel SIRT1 activators with cardioprotective efficacy.
- NATIONAL COLLABORATION: Participation in research activities with a national collaboration with the Pharmacology research group of the University of Florence directed by Professor Carla Ghelardini and Professor Lorenzo Di Cesare Mannelli to conduct research projects aimed at evaluating the cardioprotective effects and investigating specific pharmacological mechanisms of action of naturally occurring isothiocyanates in in vitro, ex vivo, and in vivo models.

- NATIONAL COLLABORATION: Participation in research activities under a national collaboration with the Veterinary Anatomy research group at the University of Pisa, led by Professor Vincenzo Miragliotta, to conduct research projects aimed at evaluating the pharmacological, phytotherapeutic, and nutraceutical effects in in vivo models of morpho-functional alterations in the cardiometabolic system (heart failure, cardiac fibrosis, metabolic syndrome, obesity).
- NATIONAL COLLABORATION: Participation in research activities under a national collaboration with the research group led by Dr. Francesco Meneguzzo of the Institute for Bio-Economy of the National Research Council (CNR), to conduct research projects aimed at evaluating the cardioprotective effects of extracts obtained from citrus industry by-products using hydrodynamic cavitation.
- INTERNATIONAL COLLABORATION: Participation in international collaborative research with the research group led by Professor Hajar Sirous of the Bioinformatics Research Center, School of Pharmacy and Pharmaceutical Sciences, Isfahan University of Medical Sciences, Isfahan, Iran, to conduct research projects aimed at identifying new potential pharmacological approaches through computational drug repurposing models.
- NATIONAL COLLABORATION: Participation in national collaborative research with the Histology research group at the University of Pisa led by Professors Nunzia Bernardini and Carolina Pellegrini to conduct research projects aimed at defining the pharmacological effects of both synthetic and natural molecules in modulating the browning process in murine fibroblasts (3T3-L1 cells).

## ORGANIZATION OR PARTICIPATION AS A SPEAKER AT SCIENTIFIC CONFERENCES IN ITALY OR ABROAD

**Moderations and Organizations**

- MODERATOR, 1st session (Plenary lectures and Oral communications) and member of the ORGANIZING COMMITTEE of the IRPES 2020 INTERNATIONAL CONGRESS: Innovative Research in Pharmaceutical and Environmental Sciences. Pisa, December 4, 2020.
- MODERATOR, 5th session (Plenary lectures and Oral communications) and member of the ORGANIZING COMMITTEE of the IRPES 2021 INTERNATIONAL CONGRESS: Innovative Research in Pharmaceutical and Environmental Sciences. Pisa, November 19, 2021.

**Invited Oral Communications**

- NATIONAL CONGRESS. INVITED SPEAKER of the oral communication entitled: Effects of a hydroalcoholic extract from Cymodocea nodosa on the metabolic profile in obesogenic diet-fed mice. 2nd Conference of the Center for Marine Pharmacology: A Sea of Opportunities. Pisa, July 9, 2024.
- INTERNATIONAL PHARMACEUTICAL CONFERENCE. INVITED SPEAKER "The Multifaceted Aspects in Pharmaceutical and Medical Research." Tirana, Albania, May 12, 2023.
- NATIONAL CONGRESS. INVITED SPEAKER of the oral presentation entitled: Glucoerucin, a glucosinolate contained in Eruca sativa Mill., prevents metabolic syndrome in mice fed a high-fat diet: modulation of the irisin pathway and the browning process. National Monothematic Conference "Sulfanutraceuticals: New Phytotherapeutic and Nutraceutical Perspectives from Alliaceae and Brassicaceae." SYRP (Italian Society of Phytotherapy Young Researchers Project). Pisa, December 20, 2022.
- INTERNATIONAL CONGRESS. INVITED SPEAKER of the oral presentation entitled: Translational application of pharmacometric modeling approach: Gatifloxacin lesion PK in a rabbit model of tuberculosis. IRPES 2022 Conference “Innovative Research in Pharmaceutical and Environmental Sciences.” Pisa, December 2, 2022.

**Oral Presentations**

- NATIONAL CONGRESS. SPEAKER of the oral presentation entitled: Erucin and Sulforaphane, natural sulfur compounds for the management of metabolic disorders: evaluation of antioxidant effects and modulation of de-novo browning process on 3T3-L1 preadipocyte cells. 2nd Intersociety Congress on Plant Products for Health: The Role of Medicinal Plants in Modern Medicine. Naples, April 10-12, 2025.

- NATIONAL CONGRESS. Speaker of the oral presentation entitled: Metformin-isothiocyanate (Met-ITC), the new hybrid molecule for the modulation of the browning process and the management of oxidative stress associated with obesity: in vitro evaluation on murine preadipocytes and mature white adipocytes. 42nd National Congress of the Italian Society of Pharmacology, “Science today for a better medicine tomorrow.” Sorrento, November 13-16, 2024.
- NATIONAL CONGRESS. Speaker of the oral presentation entitled: Metformin-isothiocyanate (Met-ITC), a new bullet for the management of oxidative stress associated with obesity: in vitro evaluation on murine preadipocytes and mature white adipocytes. 2nd SIF (Italian Society of Pharmacology) Monothematic Conference, “Behavioral and metabolic aspects of obesity and eating disorders.” Camerino, June 6-7, 2024.
- NATIONAL CONGRESS. Speaker of the oral presentation entitled: Erucin and H2S as players in mitochondrial Kv7-mediated cardioprotection. SIF (Italian Society of Pharmacology) monothematic conference: The molecular basis of cardiometabolic pharmacology: cross-talk between heart, vessels, and metabolism. Parma, October 16-17, 2023.
- NATIONAL CONGRESS. Speaker of the oral presentation entitled: Glucoerucin, a glucosinolate contained in Eruca sativa Mill., prevents metabolic syndrome in mice fed a high-fat diet: modulation of the irisin pathway and the "browning" process. XIII National Congress of SINut (Italian Society of Nutraceuticals). Bologna, September 14-16, 2023.
- NATIONAL CONGRESS. Speaker of the oral presentation entitled: Computational repurposing of FDA-approved drugs for the potential treatment of lipodystrophy syndrome by disruption of irisin dimerization. XXV Conference of Young SIF Pharmacologists 2023. Urbino, September 5-8, 2023.
- NATIONAL CONGRESS. Speaker of the oral presentation entitled: Glucoerucin, a glucosinolate contained in Eruca sativa Mill., prevents metabolic syndrome in mice fed a high-fat diet: modulation of the irisin pathway and the "browning" process. 1st Intersociety Congress on Plant Products for Health: The Role of Medicinal Plants in Modern Medicine. Padua, June 15-17, 2023.
- NATIONAL CONGRESS. Speaker of the oral presentation entitled: Cardioprotective effect of erucin against ischemia/reperfusion injury through the persulfidation of mito-Kv7 channels. XIII SYRP (Italian Society of Phytotherapy Young Researchers Project) conference. Brescia, April 30, 2023.
- NATIONAL CONGRESS. Speaker of the oral presentation entitled: The glucosinolate glucoerucin promotes browning in a murine model of diet-induced metabolic disorders. 1st Joint Meeting on Natural Products Pharmacology SIF - SIPHAR - IMGNPP. Naples, February 24-26, 2022.
- INTERNATIONAL CONGRESS. Speaker of the oral presentation entitled: Is H2S the player in mitochondrial Kv7-mediated cardioprotection of the isothiocyanate erucin? Natural Products for Healthy Aging “From Molecular Targets to Therapy.” e-conference sponsored by The Academic Consortium for the 21st Century (AC21). November 8-10, 2021.
- NATIONAL CONGRESS. Speaker of the oral presentation entitled: Prevention of endothelial dysfunction by the polyphenolic extract TAURISOLO®: from preclinical to clinical. 11th National Congress of SINut (Italian Society of Nutraceuticals). Bologna, November 4-6, 2021.
- NATIONAL CONGRESS. Speaker of the oral presentation entitled: Protective effects of mandarin juice (Citrus reticulata Blanco) against metabolic syndrome in rats fed a high-fat diet. 10th SYRP (Italian Society of Phytotherapy Young Researchers Project) e-conference, October 23, 2020.

**Date and place**

**01/07/2026, ROME**