CURRICULUM VITAE

PERSONAL INFORMATION

Name: **MARIA ANTONIETTA BARBIERI**

Email: mariaantonietta.barbieri@unicamillus.org

CURRENT POSITION

TENURE-TRACK RESEARCHER (RTT) IN PHARMACOLOGY

ACADEMIC RECRUITMENT FIELD: GSD 05/BIOS-11

SCIENTIFIC DISCIPLINARY SECTOR: BIOS-11/A

UNICAMILLUS – SAINT CAMILLUS INTERNATIONAL UNIVERSITY OF HEALTH SCIENCES

ROME, ITALY

TEACHING AND RESEARCH ACTIVITIES

• Date (from – to): Academic Year 2025/2026

• Position: **Teaching activity** within the Second-Level University Master's Programme in "Multidisciplinary Approaches to Addictive Disorders" at the University of Messina.
Teaching area: Pharmacology and Toxicology of Addictive Substances
Scientific Disciplinary Sector: BIOS-11/A
Teaching load: 1 ECTS credit, 6 hours

• Date (from – to): 1 October 2022 – 30 September 2025

• Position: **Subject Expert in Pharmacology**
Master's Degree Programme in Clinical and Health Psychology across the Lifespan, Department of Clinical and Experimental Medicine, University of Messina.
Scientific Disciplinary Sector: BIO/14

• Date (from – to): 1 September 2023 – 31 August 2024

• Position: **International Research Fellowship**

• Institution: Department of Drug Design and Pharmacology
University of Copenhagen
Copenhagen, Denmark

EDUCATION AND TRAINING

• Date (from – to): 7 March 2025 – 7 March 2037

• Qualification: **Italian National Scientific Qualification for the position of Associate Professor**
Academic Recruitment Field 05/G1 – Pharmacology, Clinical Pharmacology and Pharmacognosy

• Date (from – to): 3 October 2021 – 20 December 2024

• Qualification: **PhD in Translational Molecular Medicine and Surgery**
Awarded on 20 December 2024 with the final evaluation of Excellent with Honours

• Date (from – to): 20 March 2023 – 13 December 2024

• Qualification: **Second-Level University Master's Degree in Clinical Research and Medical Affairs: Medicinal Products and Medical Devices**
Guglielmo Marconi University – Business School

Awarded on 13 December 2024
Final grade: 110/110

• Date (from – to) 16 January 2018 – 8 November 2021
• Qualification **Specialization in Clinical Pharmacology and Toxicology**
Awarded on 8 November 2021
Final grade: 50/50 with Honours

• Date (from – to) 4 November 2016 – 13 December 2017
• Qualification **Second-Level University Master's Degree in Pharmacovigilance, Pharmacoepidemiology and Pharmacoeconomics: Real-World Data-Based Evaluations**
University of Messina
Awarded on 13 December 2017
Final grade: 110/110

• Date (from – to) 1 October 2011 – 21 July 2016
• Qualification **Master's Degree in Pharmacy**
University of Messina
Awarded on 21 July 2016
Final grade: 110/110 with Honours

AWARDS AND HONOURS

SIF–Farmindustria Award for Pharmacological Research
Recipient of the 2023 SIF–Farmindustria Award for Pharmacological Research (€5,000), established by the Italian Society of Pharmacology (SIF) and Farmindustria, and awarded to outstanding researchers from academic and research institutions.
The award ceremony took place during the 15th National Pharma Forum, Rome, Italy, on 6 October 2023.

Grant for Best Oral Communication
Awarded for the oral presentation entitled: "Adverse Drug Reactions Related to Tyrosine Kinase Inhibitors in Cancer Treatment: Insights and Implications in Pharmacovigilance."
Presented at the Italian Society of Pharmacology (SIF) Monothematic Meeting: "Pharmacovigilance of Biological Medicines, Including Biosimilars, in Chronic Inflammatory Dermatological, Onco-Hematological, Gastroenterological and Rheumatological Diseases: Clinical Practice Experience."
University "Magna Graecia" of Catanzaro, Catanzaro, Italy, 16–17 May 2024.

4EU+ Grant for Physical Short-Term Mobility
Recipient of the 4EU+ Grant for Physical Short-Term Mobility to attend the advanced course: "4EU+ PharmacoEpi (Advanced Course): An Integrated 4EU+ Pharmacoepidemiology Educational Course." Held at Heidelberg University, Germany (6–7 May 2024).
The course was jointly organized by INSERM – Institut Pierre Louis d'Épidémiologie et de Santé Publique, Sorbonne Université (France), University of Milan (Italy), University of Copenhagen (Denmark), Heidelberg University (Germany).

SIF Research Fellowship for Short-Term Research Abroad
Recipient of the Italian Society of Pharmacology (SIF) Research Fellowship supporting an international research stay of at least eight months at the Department of Drug Design and Pharmacology, University of Copenhagen (Denmark).
Research project: "Network Analyses in Real-World Data: A Focus on Pharmacoepidemiology."

Best Poster Award

Awarded for the poster: "Spontaneous Reporting of Adverse Drug Reactions Associated with Newer Long-Acting Injectable Antipsychotics in Italy."

Presented at the 38th National Congress of the Italian Society of Pharmacology (SIF) "Drugs, Health and Quality of Life"

Rimini, Italy, 25–28 October 2017.

Best Poster Award

Awarded for the poster: "Safety Profile of Antipsychotic Drugs: An Analysis of the Sicilian Regional Spontaneous Reporting System."

Presented at the conference:

"Pharmacovigilance and Drug and Vaccine Safety."

Organized by the Italian Society of Pharmacovigilance, University of Campania "Luigi Vanvitelli", Naples, Italy, 14 June 2017.

PROFESSIONAL EXPERIENCE

• Date (from – to) 19 July 2024 – 18 April 2026

• Position **Researcher Under40 to Hire (PNRR Project)**

Research Unit 4, University Hospital "G. Martino", Messina, Italy

Principal Investigator: Dr. Annamaria Cattaneo, IRCCS Centro San Giovanni di Dio Fatebenefratelli

Project code: PNRR-MAD-2022-12375859 (CUP H43C22001190006)

Research project: "Inflammation and Depression: A Multidisciplinary Approach to Dissect Pathogenetic Mechanisms in Disease Onset, Comorbidity and Treatment Response."

Funded by the European Union – NextGenerationEU.

• Date (from – to) 30 November 2023 – 1 July 2024

• Position **Research Team Member – PRIN PNRR 2022 Project**

University of Messina, Italy

Scientific Coordinator: Prof. Elisabetta Marini

Research Unit Coordinator: Prof. Vincenzo Arcoraci

Participation in the PRIN PNRR 2022 research project: "Body Composition as a Tool for Tailoring Therapeutic Interventions in Epilepsy"

(Project Code: P2022JLLS9_002)

• Date (from – to) 10 October 2022 – 18 July 2024

• Position **Research Fellow**

Department of Clinical and Experimental Medicine, Clinical Pharmacology Unit, University Hospital "G. Martino", Messina, Italy

Scientific Supervisor: Prof. Edoardo Spina

Research fellowship within the active pharmacovigilance project: VALORE – Work Package 2 (WP2): Active Pharmacovigilance Monitoring in Rheumatology, Gastroenterology and Dermatology

The project was conducted within the Italian multi-regional active pharmacovigilance programme aimed at evaluating the safety, prescribing appropriateness, and treatment adherence of biological medicines used in regional dermatology, gastroenterology, and rheumatology centres.

• Date (from – to) 1 September 2020 – 31 August 2022

• Position **Research Fellow**

Department of Internal Medicine, Gastroenterology and Chronic Intestinal Diseases Unit, University Hospital "G. Martino", Messina, Italy

Scientific Supervisor: Prof. Walter Fries

Research fellowship within the active pharmacovigilance project: "Safety Evaluation of Currently Approved Therapies for Inflammatory Bowel Diseases in Older Adults."

• Date (from – to)	19 August 2019 – 18 August 2020
• Position	**Research Fellow**
	Department of Clinical and Experimental Medicine, Clinical Pharmacology Unit, University Hospital "G. Martino", Messina, Italy
	Scientific Supervisor: Prof. Edoardo Spina
	Research fellowship within the multi-regional active pharmacovigilance programme entitled: "Evaluation of the Safety, Prescribing Appropriateness and Treatment Adherence of Biological Medicines Used in Regional Dermatology, Gastroenterology and Rheumatology Centres."
• Date (from – to)	3 April 2017 – 2 April 2019
• Position	**Research Fellow**
	Department of Clinical and Experimental Medicine, Clinical Pharmacology Unit, University Hospital "G. Martino", Messina, Italy
	Scientific Supervisor: Prof. Edoardo Spina
	Research fellowship within the active pharmacovigilance project: "Evaluation of the Tolerability and Safety Profile of Antipsychotic Drugs in the Paediatric Population."

OTHER RESEARCH ACTIVITIES

Individual contribution to scientific papers and articles published in international journals within the Academic Recruitment Field 05/G1 – Pharmacology, Clinical Pharmacology and Pharmacognosy.

Number of publications: 55. Total Scopus citations: 803. Scopus H-index: 18. (These metrics are updated as of 27 July 2026).

Member of the Executive Board of the Italian Society of Pharmacology Early Career Pharmacologists Group (SIF-ECPG) for the 2024–2026 term.

International research collaboration with the research group of Prof. Francesco Salvo, Full Professor of Pharmacology at the University of Bordeaux, France, on research projects aimed at defining the safety profile of daridorexant through disproportionality analyses performed using international pharmacovigilance databases.

Research output: Cicala G, Barbieri MA, Russo G, Salvo F, Spina E. Safety of Dual Orexin Receptor Antagonist Daridorexant: A Disproportionality Analysis of Publicly Available FAERS Data. Pharmaceuticals (Basel). 2024 Mar 6;17(3):342. doi:10.3390/ph17030342.

International research collaboration with the research group of Prof. Maurizio Sessa, Associate Professor of Pharmaceutical Informatics, Department of Drug Design and Pharmacology, University of Copenhagen, Denmark, on research projects in pharmacoepidemiology and pharmacovigilance using Danish and international healthcare databases and innovative methodologies, including artificial intelligence.

Major research outputs:

- Barbieri MA, Battini V, Carnovale C, et al. Artificial intelligence in pharmacovigilance signal management: a review of tools, implementations, research, and regulatory landscape. Expert Opinion on Drug Safety. 2025.
- Barbieri MA, Peker DS, Askar MGS, et al. Low-dose aspirin and risk of anaemia in older adults: insights from a Danish register-based cohort study. European Heart Journal – Quality of Care and Clinical Outcomes. 2025.
- Barbieri MA, Battini V, Sessa M. Artificial intelligence for the optimal management of community-acquired pneumonia. Current Opinion in Pulmonary Medicine. 2024.
- Barbieri MA, Abate A, Balogh OM, et al. Network Analysis and Machine Learning for Signal Detection and Prioritization Using Electronic Healthcare Records and Administrative Databases: A Proof of Concept in Drug-

Induced Acute Myocardial Infarction. Drug Safety. 2025.

- Barbieri MA, Nielsen SMN, Rossi A, et al. A newly developed method for assessing co-exposure to free dose combinations: a proof-of-concept study using antihypertensive medications in Danish registers. Aging Clinical and Experimental Research. 2024.

International research collaboration with the research group of Prof. Emilio Perucca, Full Professor of Clinical Pharmacology and Neurology at the University of Melbourne, Australia, on research projects aimed at defining the efficacy and safety profile of antiseizure medications, including cenobamate for the treatment of epilepsy.

Research output: Barbieri MA, Perucca E, Spina E, Rota P, Franco V. Cenobamate: A Review of its Pharmacological Properties, Clinical Efficacy and Tolerability Profile in the Treatment of Epilepsy. CNS & Neurological Disorders – Drug Targets. 2023.

Research activity in collaboration with the research group of Prof. Giovambattista De Sarro, Full Professor of Pharmacology at the "Magna Graecia" University of Catanzaro, aimed at conducting research projects to define the efficacy and safety profile of biological drugs used in rheumatology through active pharmacovigilance studies based on the analysis of national databases.

Research output: Barbieri MA, Cicala G, Cutroneo PM, Gerratana E, Palleria C, De Sarro C, Vero A, Iannone L, Manti A, Russo E, De Sarro G, Atzeni F, Spina E. Safety Profile of Biologics Used in Rheumatology: An Italian Prospective Pharmacovigilance Study. J Clin Med. 2020 Apr 24;9(4):1227. doi:10.3390/jcm9041227. PMID: 32344563; PMCID: PMC7230621.

Research activity in collaboration with the research group of Prof. Valentina Franco, currently Associate Professor of Pharmacology at the University of Pavia, aimed at conducting research projects to define the safety profile of antiseizure medications in the paediatric population through disproportionality studies based on the analysis of national pharmacovigilance databases, and to evaluate the efficacy and safety profile of cenobamate in the treatment of epilepsy.

Research outputs: Franco V, Barbieri MA, Cutroneo PM, Arena I, Cicala G, Marchione P, Spina E, Perucca E. Pediatric adverse reactions to antiseizure medications: An analysis of data from the Italian spontaneous reporting system (2001–2019). Epilepsy Behav. 2021 Jun;119:107989. doi:10.1016/j.yebeh.2021.107989. Epub 2021 May 1. PMID: 33946010.

Research activity in collaboration with Dr. Laura Sottosanti and Dr. Pasquale Marchione, Signal Management Officers at the Italian Medicines Agency (AIFA), aimed at conducting research projects to define the safety profile of ototoxic drugs and antiseizure medications through disproportionality studies based on the analysis of national pharmacovigilance databases.

Research outputs:

- Barbieri MA, Cicala G, Cutroneo PM, Mocciaro E, Sottosanti L, Freni F, Galletti F, Arcoraci V, Spina E. Ototoxic Adverse Drug Reactions: A Disproportionality Analysis Using the Italian Spontaneous Reporting Database. Front Pharmacol. 2019 Oct 8;10:1161. doi:10.3389/fphar.2019.01161. PMID: 31649536; PMCID: PMC6791930.
- Franco V, Barbieri MA, Cutroneo PM, Arena I, Cicala G, Marchione P, Spina E, Perucca E. Pediatric adverse reactions to antiseizure medications: An analysis of data from the Italian spontaneous reporting system (2001–2019). Epilepsy Behav. 2021 Jun;119:107989. doi:10.1016/j.yebeh.2021.107989. Epub 2021 May 1. PMID: 33946010.

Ordinary Member of the **Italian Society of Pharmacology (SIF)** since 17 July 2017.

Member of the **ISOP (International Society of Pharmacovigilance)** since 1 January 2019.

ARTICLES
ORIGINAL RESEARCH

Cicala G, **Barbieri MA**, Russo G, Ciurleo R, Grugno R, Quartarone A, Spina E. Safety Profile of Zavegepant in the Treatment of Acute Migraine: Insights from the FDA Adverse Event Monitoring System Database. Pharmaceuticals (Basel). 2026 Jun 15;19(6):943. doi: 10.3390/ph19060943. PMID: 42356560; PMCID: PMC13304639.

Heckmann NS, Papoutsi DG, **Barbieri MA**, Battini V, Mølgaard SN, Schmidt SØ, Melskens L, Sessa M. Biomedical Large Language Models and Prompt Engineering for Causality Assessment of Individual Case Safety Reports in Pharmacovigilance. Pharm Res. 2026 May 23. doi: 10.1007/s11095-026-04121-4. Epub ahead of print. PMID: 42174348.

Barbieri MA, Cicala G, Molonia A, Alibrandi A, Pallio G, La Fauci E, Ingrassia M, Irrera N, Benedetto L. Factors Associated with Parental Vaccine Hesitancy in Childhood Immunization: Insights from a Cross-Sectional Survey in Southern Italy. Pharm Res. 2026 Apr 2. doi: 10.1007/s11095-026-04072-w. Epub ahead of print. PMID: 41927963.

Barbieri MA, Peker DS, Askar MGS, Battini V, Abate A, Carnovale C, Clementi E, Ofori-Asenso R, Spina E, Pareek M, Kragholm K, Torp-Pedersen C, Sessa M. Low-dose aspirin and risk of anaemia in older adults: insights from a Danish register-based cohort study. Eur Heart J Qual Care Clin Outcomes. 2025 Dec 19;11(8):1279-1289. doi: 10.1093/ehjqcco/qcae089

Abate A, Poncato E, **Barbieri MA**, Powell G, Rossi A, Peker S, Hviid A, Bate A, Sessa M. Off-the-Shelf Large Language Models for Causality Assessment of Individual Case Safety Reports: A Proof-of-Concept with COVID-19 Vaccines. Drug Saf. 2025 Jul;48(7):805-820. doi: 10.1007/s40264-025-01531-y. Epub 2025 Mar 12. PMID: 40075032; PMCID: PMC12174240

Barbieri MA, Russo G, Cicala G, Zito C, Spina E, Silvestris N, Santarpia M. Cardiovascular Safety Profile of BRAF and MEK Inhibitors in Melanoma: FAERS Data Through a Retrospective Disproportionality Analysis (2014-2023). Cancers (Basel). 2025 May 23;17(11):1755. doi: 10.3390/cancers17111755. PMID: 40507236; PMCID: PMC12153699

Barbieri MA, Russo G, Cicala G, Andò G, Franchina T, Silvestris N, Santarpia M, Spina E. Unveiling cardiovascular and respiratory toxicities with monoclonal antibodies in multiple myeloma: disproportionality analysis from the FDA Adverse Event Reporting System. Eur J Clin Pharmacol. 2025 May;81(5):755-770. doi: 10.1007/s00228-025-03824-8. Epub 2025 Mar 17. PMID: 40095047

Speranza D, Omero F, Cianci V, Marafioti M, Infurna C, Carroccio P, Spina E, **Barbieri MA**, Esposito E, Silvestris N, Santarpia M. Comparison Study of the Safety Profile of Olaparib Versus Niraparib: Analysis of Real-World Data from EudraVigilance. Pharmaceuticals (Basel). 2025 Apr 4;18(4):528. doi: 10.3390/ph18040528. PMID: 40283963; PMCID: PMC12030022

Rottura M, **Barbieri MA**, Siniscalchi C, Di Micco P, Drago SFA, Gigliotti De Fazio M, Cicero AFG, Fogacci F, Armentaro G, Sciacqua A, Arcoraci V, Irrera N, Imbalzano E. Proprotein convertase subtilisin/kexin type 9: a promising marker of cardiovascular risk in post-menopausal diabetic women in primary prevention. Front Med (Lausanne). 2025 Mar 12;12:1521344. doi: 10.3389/fmed.2025.1521344. PMID: 40144869; PMCID: PMC11936939

Barbieri MA, Abate A, Balogh OM, Pétervári M, Ferdinandy P, Ágg B, Battini V, Cocco M, Rossi A, Carnovale C, Casula M, Spina E, Sessa M. Network Analysis and

Machine Learning for Signal Detection and Prioritization Using Electronic Healthcare Records and Administrative Databases: A Proof of Concept in Drug-Induced Acute Myocardial Infarction. Drug Saf. 2025 Feb 7. doi: 10.1007/s40264-025-01515-y. Epub ahead of print. PMID: 39918677

Barbieri MA, Nielsen SMN, Rossi A, Olmastroni E, Casula M, Spina E, Sessa M. A newly developed method for assessing co-exposure to free dose combinations: a proof-of-concept study using antihypertensive medications in Danish registers. Aging Clin Exp Res. 2024 Nov 26;36(1):226. doi: 10.1007/s40520-024-02879-4. PMID: 39589584; PMCID: PMC11599442

Galletti C, Sireci F, Stilo G, **Barbieri MA**, Messina G, Manzella R, Portelli D, Zappalà AG, Diana M, Frangipane S, Immordino A, Lorusso F, Dispensa F, Ciodaro F, Freni F, Galletti F, Gallina S, La Mantia I, Galletti B. Mepolizumab in chronic rhinosinusitis with nasal polyps: Real life data in a multicentric Sicilian experience. Am J Otolaryngol. 2025 Jan-Feb;46(1):104597. doi: 10.1016/j.amjoto.2024.104597. Epub 2025 Jan 6. PMID: 39826192

Cicala G, Russo G, Santoro V, Franchina T, Silvestris N, Santarpia M, Spina E, **Barbieri MA**. Neuropsychiatric Adverse Events with Monoclonal Antibodies Approved for Multiple Myeloma: An Analysis from the FDA Adverse Event Reporting System. Pharmaceuticals (Basel). 2024 Sep 25;17(10):1266. doi: 10.3390/ph17101266. PMID: 39458907; PMCID: PMC11510275

Battini V, Cocco M, **Barbieri MA**, Powell G, Carnovale C, Clementi E, Bate A, Sessa M. Timing Matters: A Machine Learning Method for the Prioritization of Drug-Drug Interactions Through Signal Detection in the FDA Adverse Event Reporting System and Their Relationship with Time of Co-exposure. Drug Saf. 2024 Sep;47(9):895-907. doi: 10.1007/s40264-024-01430-8

Galletti C, Ciodaro F, **Barbieri MA**, Gambino F, Ferrisi MG, Portelli D, Catalano N, Freni F, Spina E, Galletti B. Effectiveness and safety profile of mepolizumab in chronic rhinosinusitis with nasal polyps: Real life data in a tertiary care. American Journal of Otolaryngology – Head and Neck Medicine and Surgery. 2024, https://doi.org/10.1016/j.amjoto.2024.104329

Cicala G, **Barbieri MA**, Russo G, Salvo F, Spina E. Safety of Dual Orexin Receptor Antagonist Daridorexant: A Disproportionality Analysis of Publicly Available FAERS Data. Pharmaceuticals (Basel). 2024 Mar 6;17(3):342. doi: 10.3390/ph17030342

Battini V, **Barbieri MA**, Carnovale C, Spina E, Clementi E, Sessa M. Comparing major and mild cognitive impairment risks in older type-2 diabetic patients: a Danish register-based study on dipeptidyl peptidase-4 inhibitors vs. glucagon-like peptide-1 analogues. J Neurol. 2024 Mar 22. doi: 10.1007/s00415-024-12300-9

Shakibfar S, Allin KH, Jess T, **Barbieri MA**, Battini V, Simoncic E, Kirchgesner J, Ulven T, Sessa M. Drug Repurposing in Crohn's Disease Using Danish Real-World Data. Pragmat Obs Res. 2024 Feb 21;15:17-29. doi: 10.2147/POR.S444569

Sorbara EE, **Barbieri MA**, Russo G, Cicala G, Spina E. Cardiovascular Adverse Drug Reactions of Anti-Calcitonin Gene-Related Peptide Monoclonal Antibodies for Migraine Prevention: An Analysis from the European Spontaneous Adverse Event Reporting System. BioDrugs. 2024 Mar;38(2):275-285. doi: 10.1007/s40259-024-00651-8

Barbieri MA, Russo G, Sorbara EE, Cicala G, Franchina T, Santarpia M, Speranza D, Spina E, Silvestris N. Neuropsychiatric adverse drug reactions with oral tyrosine

kinase inhibitors in metastatic colorectal cancer: an analysis from the FDA Adverse Event Reporting System. Front Oncol. 2023 Oct 31;13:1268672. doi: 10.3389/fonc.2023.1268672

Galletti C, Ragusa M, Sireci F, Ciodaro F, **Barbieri MA**, Giunta G, Grigaliute E, Immordino A, Lorusso F, Dispenza F, Freni F, Galletti F, Gallina S, La Mantia I, Galletti B. Dupilumab in chronic rhinosinusitis with nasal polyps: Real life data in a multicentric Sicilian experience. Am J Otolaryngol. 2024 Jan-Feb;45(1):104106. doi: 10.1016/j.amjoto.2023.104106

Russo G, **Barbieri MA**, Sorbara EE, Cicala G, Franchina T, Santarpia M, Silvestris N, Spina E. Renal Disorders with Oral Tyrosine Kinase Inhibitors in Metastatic Colorectal Cancer: An Analysis from the FDA Adverse Event Reporting System Database. Biomedicines. 2023 Aug 20;11(8):2311. doi: 10.3390/biomedicines11082311

Galletti C, **Barbieri MA**, Ciodaro F, Freni F, Galletti F, Spina E, Galletti B. Effectiveness and Safety Profile of Dupilumab in Chronic Rhinosinusitis with Nasal Polyps: Real-Life Data in Tertiary Care. Pharmaceuticals. 2023; 16(4):630. https://doi.org/10.3390/ph16040630

Cicala G, de Filippis R, **Barbieri MA**, Cutroneo PM, De Fazio P, Schoretsanitis G, Spina E. Tolerability profile of paliperidone palmitate formulations: A pharmacovigilance analysis of the EUDRAVigilance database. Front Psychiatry. 2023 Apr 6;14:1130636. doi: 10.3389/fpsyt.2023.1130636

Barbieri MA, Sorbara EE, Russo G, Cicala G, Franchina T, Santarpia M, Silvestris N, Spina E. Neuropsychiatric Adverse Drug Reactions with Tyrosine Kinase Inhibitors in Gastrointestinal Stromal Tumors: An Analysis from the European Spontaneous Adverse Event Reporting System. Cancers (Basel). 2023 Mar 20;15(6):1851. doi: 10.3390/cancers15061851. PMID: 36980737; PMCID: PMC10046586.

Barbieri MA, Viola A, Cicala G, Spina E, Fries W. Effectiveness and Safety Profiles of Biological Therapies in Inflammatory Bowel Disease: Real Life Data from an Active Pharmacovigilance Project. Biomedicines. 2022 Dec 18;10(12):3280. doi: 10.3390/biomedicines10123280. PMID: 36552036; PMCID: PMC9775949.

Barbieri MA, Sorbara EE, Cicala G, Santoro V, Cutroneo PM, Franchina T, Santarpia M, Silvestris N, Spina E. Safety profile of tyrosine kinase inhibitors used in non-small-cell lung cancer: An analysis from the Italian pharmacovigilance database. Front Oncol. 2022 Nov 23;12:1005626. doi: 10.3389/fonc.2022.1005626. PMID: 36505840; PMCID: PMC9727240.

Arcoraci V, Squadrito F, Rottura M, **Barbieri MA**, Pallio G, Irrera N, Nobili A, Natoli G, Argano C, Squadrito G, Corrao S. Beta-Blocker Use in Older Hospitalized Patients Affected by Heart Failure and Chronic Obstructive Pulmonary Disease: An Italian Survey From the REPOSI Register. Front Cardiovasc Med. 2022 May 16;9:876693. doi: 10.3389/fcvm.2022.876693. PMID: 35651906; PMCID: PMC9149000.

Barbieri MA, Sorbara EE, Battaglia A, Cicala G, Rizzo V, Spina E, Cutroneo PM. Adverse Drug Reactions with Drugs Used in Multiple Sclerosis: An Analysis from the Italian Pharmacovigilance Database. Front Pharmacol. 2022 Feb 23;13:808370. doi: 10.3389/fphar.2022.808370. PMID: 35281926; PMCID: PMC8904918.

Rottura M, Scondotto G, **Barbieri MA**, Sorbara EE, Nasso C, Marino S, Scoglio R, Mandraffino G, Pallio G, Irrera N, Imbalzano E, Squadrito G, Squadrito F, Arcoraci V. Management of High Cardiovascular Risk in Diabetic Patients: Focus on Low Density

Lipoprotein Cholesterol and Appropriate Drug Use in General Practice. Front Cardiovasc Med. 2021 Oct 25;8:749686. doi: 10.3389/fcvm.2021.749686. PMID: 34760944; PMCID: PMC8572969.

Arcoraci V, **Barbieri MA**, Rottura M, Nobili A, Natoli G, Argano C, Squadrito G, Squadrito F, Corrao S; REPOSI investigators. Kidney Disease Management in the Hospital Setting: A Focus on Inappropriate Drug Prescriptions in Older Patients. Front Pharmacol. 2021 Oct 8;12:749711. doi: 10.3389/fphar.2021.749711. PMID: 34690782; PMCID: PMC8531549.

Barbieri MA, Sorbara EE, Cicala G, Santoro V, Cutroneo PM, Franchina T, Spina E. Adverse Drug Reactions with HER2-Positive Breast Cancer Treatment: An Analysis from the Italian Pharmacovigilance Database. Drugs Real World Outcomes. 2022 Mar;9(1):91-107. doi: 10.1007/s40801-021-00278-z. Epub 2021 Sep 15. PMID: 34528216; PMCID: PMC8844323.

Franco V, **Barbieri MA**, Cutroneo PM, Arena I, Cicala G, Marchione P, Spina E, Perucca E. Pediatric adverse reactions to antiseizure medications - An analysis of data from the Italian spontaneous reporting system (2001-2019). Epilepsy Behav. 2021 Jun;119:107989. doi: 10.1016/j.yebeh.2021.107989. Epub 2021 May 1. PMID: 33946010.

Barbieri MA, Cutroneo PM, Baratelli C, Cicala G, Battaglia A, Santoro V, Andò G, Spina E. Adverse drug reactions with oral anticoagulants: data from sicilian spontaneous reporting system database. J Clin Pharm Ther. 2021 Aug;46(4):1027-1040. doi: 10.1111/jcpt.13391. Epub 2021 Mar 1. PMID: 33646603.

Roberti R, Iannone LF, Palleria C, De Sarro C, Spagnuolo R, **Barbieri MA**, Vero A, Manti A, Pisana V, Fries W, Trifirò G, Naturale MD, Larussa T, De Francesco AE, Bosco V, Donato di Paola E, Citraro R, Luzza F, Bennardo L, Rodinò S, Doldo P, Spina E, Russo E, De Sarro G. Safety profiles of biologic agents for inflammatory bowel diseases: a prospective pharmacovigilance study in Southern Italy. Curr Med Res Opin. 2020 Sep;36(9):1457-1463. doi: 10.1080/03007995.2020.1786681. Epub 2020 Jul 27. PMID: 32573307.

Squadrito F, Rottura M, Irrera N, Minutoli L, Bitto A, **Barbieri MA**, Cicala G, Mecchio A, Pallio G, Marino S, Picciolo G, Altavilla D, Arcoraci V. Anti-obesity drug therapy in clinical practice: Evidence of a poor prescriptive attitude. Biomed Pharmacother. 2020 Aug;128:110320. doi: 10.1016/j.biopha.2020.110320. Epub 2020 Jun 2. PMID: 32502842.

Barbieri MA, Rottura M, Cicala G, Mandraffino R, Marino S, Irrera N, Mannucci C, Santoro D, Squadrito F, Arcoraci V. Chronic Kidney Disease Management in General Practice: A Focus on Inappropriate Drugs Prescriptions. J Clin Med. 2020 May 4;9(5):1346. doi: 10.3390/jcm9051346. PMID: 32375415; PMCID: PMC7290782.

Barbieri MA, Cicala G, Cutroneo PM, Gerratana E, Palleria C, De Sarro C, Vero A, Iannone L, Manti A, Russo E, De Sarro G, Atzeni F, Spina E. Safety Profile of Biologics Used in Rheumatology: An Italian Prospective Pharmacovigilance Study. J Clin Med. 2020 Apr 24;9(4):1227. doi: 10.3390/jcm9041227. PMID: 32344563; PMCID: PMC7230621.

Cicala G, **Barbieri MA**, Santoro V, Tata C, Colucci PV, Vanadia F, Drago F, Russo C, Cutroneo PM, Gagliano A, Spina E, Germanò E. Safety and Tolerability of Antipsychotic Drugs in Pediatric Patients: Data From a 1-Year Naturalistic Study. Front Psychiatry. 2020 Mar 24;11:152. doi: 10.3389/fpsyt.2020.00152. PMID: 32265749; PMCID: PMC7108128.

Barbieri MA, Cicala G, Cutroneo PM, Mocciaro E, Sottosanti L, Freni F, Galletti F, Arcoraci V, Spina E. Ototoxic Adverse Drug Reactions: A Disproportionality Analysis Using the Italian Spontaneous Reporting Database. Front Pharmacol. 2019 Oct 8;10:1161. doi: 10.3389/fphar.2019.01161. PMID: 31649536; PMCID: PMC6791930.

Lo Giudice I, Mocciaro E, Giardina C, **Barbieri MA**, Cicala G, Gioffrè-Florio M, Carpinteri G, Di Grande A, Spina E, Arcoraci V, Cutroneo PM. Characterization and preventability of adverse drug events as cause of emergency department visits: a prospective 1-year observational study. BMC Pharmacol Toxicol. 2019 Apr 27;20(1):21. doi: 10.1186/s40360-019-0297-7. PMID: 31029178; PMCID: PMC6486973.

REVIEWS

Cicala G, **Barbieri MA**, Gialluisi A, Scandiffio L, Cattane N, Cattaneo A, Benedetti F, Gennarelli M, Schoretsanitis G, de Leon J, Spina E. Exploring the Influence of Inflammation on the Pharmacokinetics of Antidepressants and Antipsychotics: A Systematic Review. Current Neuropharmacology. Accepted on 03/05/2026.

Spina E, **Barbieri MA**, Alborghetti M, Nicoletti F, de Leon J. An update on the pharmacokinetic and pharmacodynamic interactions between antidepressants and antiseizure medications. Expert Opin Drug Metab Toxicol. 2026 Apr;22(4):267-287. doi: 10.1080/17425255.2026.2650188. Epub 2026 Mar 25. PMID: 41873592.

Alborghetti M, **Barbieri MA**, Nicoletti F, Spina E. Exploring drug interactions between newer antidepressants and medications used to treat neurological disorders. Expert Opin Drug Metab Toxicol. 2025 Oct;21(10):1169-1193. doi: 10.1080/17425255.2025.2566692. Epub 2025 Sep 26. PMID: 40995638.

Barbieri MA, Battini V, Carnovale C, Cocco M, Papoutsi DG, Heckmann NS, Dong G, Rossi A, Peker S, Van Manen RP, Thapar S, Sessa M. Artificial intelligence in pharmacovigilance signal management: a review of tools, implementations, research, and regulatory landscape. Expert Opin Drug Saf. 2025 Aug 13:1-16. doi: 10.1080/14740338.2025.2545926. Epub ahead of print. PMID: 40778768.

Cocco M, Carnovale C, Clementi E, **Barbieri MA**, Battini V, Sessa M. Exploring the impact of co-exposure timing on drug-drug interactions in signal detection through spontaneous reporting system databases: a scoping review. Expert Rev Clin Pharmacol. 2024 Apr 18:1-13. doi: 10.1080/17512433.2024.2343875

Barbieri, MA, Battini, V, Sessa, M. Artificial intelligence for the optimal management of community-acquired pneumonia. Current Opinion in Pulmonary Medicine. 2024;30(3):252-257. doi: 10.1097/MCP.0000000000001055

Pisani F, Rosa Pisani L, **Barbieri MA**, de Leon J, Spina E. Optimization of therapy in patients with epilepsy and psychiatric comorbidities: key points. Curr Neuropharmacol. 2022 May 26. doi: 10.2174/1570159X20666220526144314. Epub ahead of print. PMID: 35619263.

Barbieri MA, Perucca E, Spina E, Rota P, Franco V. Cenobamate: A Review of its Pharmacological Properties, Clinical Efficacy and Tolerability Profile in the Treatment of Epilepsy. CNS Neurol Disord Drug Targets. 2022 Jan 13. doi: 10.2174/1871527321666220113110044. Epub ahead of print. PMID: 35049441.

Barbieri MA, Bagnato G, Ioppolo C, Versace AG, Irrera N. Impact of the COVID-19 Pandemic on Chronic Neurological Disorders: Focus on Patients with Dementia. CNS Neurol Disord Drug Targets. 2022;21(10):1017-1026. doi: 10.2174/1871527321666220111124928. PMID: 35021982.

Spina E, **Barbieri MA**, Cicala G, de Leon J. Clinically Relevant Interactions between Atypical Antipsychotics and Anti-Infective Agents. Pharmaceuticals (Basel). 2020 Dec 2;13(12):439. doi: 10.3390/ph13120439. PMID: 33276675; PMCID: PMC7761579.

Palleria C, Roberti R, Iannone LF, Tallarico M, **Barbieri MA**, Vero A, Manti A, De Sarro G, Spina E, Russo E. Clinically relevant drug interactions between statins and antidepressants. J Clin Pharm Ther. 2020 Apr;45(2):227-239. doi: 10.1111/jcpt.13058. Epub 2019 Oct 6. PMID: 31587356.

Spina E, **Barbieri MA**, Cicala G, Bruno A, de Leon J. Clinically relevant drug interactions between newer antidepressants and oral anticoagulants. Expert Opin Drug Metab Toxicol. 2020 Jan;16(1):31-44. doi: 10.1080/17425255.2020.1700952. Epub 2019 Dec 10. PMID: 31795773.

Cicala G, **Barbieri MA**, Spina E, de Leon J. A comprehensive review of swallowing difficulties and dysphagia associated with antipsychotics in adults. Expert Rev Clin Pharmacol. 2019 Mar;12(3):219-234. doi: 10.1080/17512433.2019.1577134. Epub 2019 Feb 8. PMID: 30700161.

Spina E., Santoro V, **Barbieri MA**, Cicala G. La psicofarmacologia dei nuovi antipsicotici. Journal of Psychopathology. 25(1): 2-9; 2019.

EDITORIALS

Barbieri MA, Irrera N, Convertino I. Drug Safety and Relevant Issues in the Real-World. Pharmaceuticals (Basel). 2023 Dec 5;16(12):1689. doi: 10.3390/ph16121689

BOOKS

In the book "**Compendio di Farmacologia Generale e Speciale"**, Second Edition, published in June 2021 by Edra S.p.A.
Chapter: **Antidepressant Drugs**
Spina E., **Barbieri M.A.**, Cicala G.

In the book "**Compendio di Farmacologia Generale e Speciale"**, Second Edition, published in June 2021 by Edra S.p.A.
Chapter: **General Anesthetics**
Spina E., **Barbieri M.A.**, Cicala G.

In the book **"Manuale di farmacoterapia"**, published in March 2019 by Idelson-Gnocchi
Chapter: **Schizophrenia**
Barbieri M.A., Cicala G., Spina E.

In the book **"Manuale di farmacoterapia"**, published in March 2019 by Idelson-Gnocchi
Chapter: **"Major Depressive Disorder"**
Cicala G., **Barbieri M.A.**, Spina E.

CONGRESS AND SCIENTIFIC EVENT ORGANIZATION

Member of the Scientific Committee of the 3rd SIF-ECPG Masterclass "Pharmacologists 2.0 – Skills for Success: Leadership, Grant Writing and AI", held in Fiesole, Italy, from 6 to 8 March 2025.

Member of the Scientific Committee of the workshop "Pharmacovigilance in Neurology and Psychiatry", held online on 30 October 2025, organized by the Working Groups of the Italian Society of Pharmacology (SIF) in Neuropsychopharmacology and Pharmacovigilance, Pharmacoepidemiology, Pharmacoeconomics & Real-World Evidence (3F & RWE).

Member of the Scientific Committee of the XXVI Conference of Young SIF Pharmacologists, held in Bologna, Italy, from 30 November to 2 December 2025.

Member of the Scientific Committee of the 4th SIF-ECPG Masterclass "Pharmacologists 2.0 – Skills for Success: Leading Innovation in the Era of Artificial Intelligence", held in Fiesole, Italy, from 28 to 30 January 2026.

Tutor at the Winter School 2026 "Value and Evaluation of Medicines: Scientific and Economic Perspectives for Future Decision-Makers", held at Palazzo di Varignana, Bologna, Italy, from 9 to 11 February 2026.

Member of the Scientific Committee of the conference "Inflammation and Depression: Pathogenetic Mechanisms, Comorbidities and New Therapeutic Perspectives – Study Day in Memory of Professor Francesco Squadrito", held at the T. Cannizzaro Lecture Hall, University of Messina, Messina, Italy, on 27 March 2026.

ORAL PRESENTATIONS AT CONGRESSES AND SCIENTIFIC EVENTS

Invited Speaker at the conference "Active Vaccine Pharmacovigilance: Real-World Evidence and Vaccine Safety", with the presentation entitled: "Vaccine Hesitancy and Childhood Immunization: Evidence from a Survey Conducted in Southern Italy", held at the T. Cannizzaro Lecture Hall, University of Messina, Messina, Italy, on 28 May 2026.

Invited Speaker at the Italian Society of Pharmacology (SIF) Conference "Migraine: From Pathophysiology to Clinical Management – A Complex and Multidimensional Challenge", with the presentation entitled: "Tolerability and Safety of New Therapeutic Approaches for Migraine: Current Evidence and Clinical Perspectives", held in Messina, Italy, on 4 December 2025, at the Vittorio Ricevuto Lecture Hall, Papardo Campus, University of Messina.

Invited Speaker at the SIF Monothematic Meeting "Pharmacovigilance of Biological Medicines, Including Biosimilars, in Chronic Inflammatory Dermatological, Onco-Hematological, Gastroenterological and Rheumatological Diseases: Clinical Practice Experience", with the presentation entitled: "Adverse Drug Reactions Related to Tyrosine Kinase Inhibitors in Cancer Treatment: Insights and Implications in Pharmacovigilance", held at the "Magna Graecia" University of Catanzaro, Catanzaro, Italy, 16–17 May 2024.

Invited Speaker at the conference "Workshop on IMIDs in the Geriatric Age: Advancing Age, Increasing Risks?", with the presentation entitled: "Pharmacovigilance Update on AIFA Projects", held in Giardini Naxos (Messina), Italy, 28–29 October 2022, at the RH Naxos Hotel.

Speaker at the 42nd National Congress of the Italian Society of Pharmacology (SIF), "Science Today for a Better Medicine Tomorrow", with the presentation entitled: "Exploring Cardiovascular and Respiratory Adverse Drug Reactions of Monoclonal Antibodies for Multiple Myeloma: Insights from the Food and Drug Administration Adverse Event Reporting System", held in Sorrento (Naples), Italy, 13–16 November 2024.

Speaker at the 41st National Congress of the Italian Society of Pharmacology (SIF), "The Scientific Value and Appropriate Use of Medicines", with the presentation entitled: "Adverse Drug Reactions with Tyrosine Kinase Inhibitors in Gastrointestinal Stromal Tumors: An Analysis from the EudraVigilance Database", held in Rome, Italy, 15–19 November 2022, at the Ergife Palace Hotel.

Speaker at the 40th National Congress of the Italian Society of Pharmacology (SIF), "The Scientific Value and Appropriate Use of Medicines", with the presentation entitled: "Effectiveness and Safety Profile of Biological Therapy in Inflammatory Bowel Disease: Real-Life Data from an Active Pharmacovigilance Project", held online, 9–13 March 2021.

Speaker at the 39th National Congress of the Italian Society of Pharmacology (SIF), "Research, Innovation, Sustainability, Appropriateness and Education", during the 22nd SIF Seminar on Pharmacology for PhD Students, Fellows, Postdoctoral Researchers and Specialist Trainees, with the presentation entitled: "Chronic Kidney Disease Management in General Practice: A Focus on Inappropriate Drug Prescriptions in Sicily", held in Florence, Italy, 19–20 November 2019, at the Palazzo dei Congressi.

Speaker at the conference "7th Study Day on Gastrointestinal Diseases in Honour of Gaetano Barresi", with the presentation entitled: "Adverse Drug Reactions to Biological Medicines in Gastroenterology", held in Messina, Italy, on 15 February 2019, at the Battaglia Lecture Hall, University Hospital "G. Martino".

Speaker at the 18th National Congress of the Italian Society of Toxicology (SITOX), "Innovation, Safety and Sustainability in the 4.0 Era", with the presentation entitled: "Ototoxic Adverse Drug Reactions: An Analysis of Reports from the Italian National Pharmacovigilance Network", held in Bologna, Italy, 10–13 April 2018, at the Savoia Regency Hotel.

POSTER PRESENTATIONS AT CONGRESSES

Poster "Safety Profile of Monoclonal Antibodies Approved for Migraine: An Analysis from the European Spontaneous Adverse Event Reporting System" presented at the 41st National Congress of the Italian Society of Pharmacology (SIF), "The Scientific Value and Appropriate Use of Drugs", held in Rome, Italy, 15–19 November 2022.

Poster "Safety Profile of Tyrosine Kinase Inhibitors Approved for Gastrointestinal Stromal Tumors: Analysis from the European Spontaneous Adverse Event Reporting System" presented at the 21st ISoP Annual Meeting, "A New Era of Pharmacovigilance: Challenges and Opportunities", held in Verona, Italy, 20–23 September 2022.

Poster "Safety Profile of Dupilumab Approved for Chronic Rhinosinusitis with Nasal Polyposis: Analysis from the European Spontaneous Adverse Event Reporting System" presented at the 21st ISoP Annual Meeting, "A New Era of Pharmacovigilance: Challenges and Opportunities", held in Verona, Italy, 20–23 September 2022.

Poster "Adverse Drug Reactions With Oral Anticoagulants: Data From the Sicilian Spontaneous Reporting System Database" presented at the 40th National Congress of the Italian Society of Pharmacology (SIF), held online, 9–13 March 2021.

Poster "Safety Profile of Biologics in Rheumatologic Diseases in a Real-World Setting in Southern Italy: A Prospective Pharmacovigilance Study" presented at the 39th National Congress of the Italian Society of Pharmacology (SIF), held in Florence, Italy, 20–23 November 2019.

Poster "Ototoxic Adverse Drug Reactions: A Pharmacovigilance Study Using the Italian Spontaneous Reporting Database" presented at the 18th Annual Meeting of the International Society of Pharmacovigilance (ISoP), held in Geneva, Switzerland, 11–14 November 2018.

Poster "Ototoxic Adverse Drug Reactions: An Analysis of the Italian National Spontaneous Reporting Database" presented at the SIF Monothematic Meeting, "New and Old Challenges for Clinical Pharmacology: From Therapeutic Drug Monitoring to Pharmacogenetics and Pharmacovigilance", held in Naples, Italy, 15–16 March 2018.

Poster "Spontaneous Reporting of Adverse Drug Reactions Associated with Newer Long-Acting Injectable Antipsychotics in Italy" presented at the 38th National Congress of the Italian Society of Pharmacology (SIF), "Drugs, Health and Quality of Life", held in Rimini, Italy, 25–28 October 2017.

Poster "Safety Profile of Antipsychotic Drugs: An Analysis of the Sicilian Regional Spontaneous Reporting System" presented at the conference "Pharmacovigilance and Drug and Vaccine Safety", held at the University of Campania "Luigi Vanvitelli", Naples, Italy, on 14 June 2017.

PARTICIPATION IN EDITORIAL BOARDS OF SCIENTIFIC JOURNALS

From 1 February 2026 – Present

Guest Editor of the Special Issue entitled "Drug Safety and Real-World Evidence: From Databases to Artificial Intelligence" for the international journal Pharmaceuticals.

The Special Issue is currently open for new submissions.

24 November 2023 – 31 March 2025

Guest Editor of the Special Issue entitled "Drug Safety and Relevant Issues in the Real-World 2024" for the international journal Pharmaceuticals.

The Special Issue resulted in the publication of seven scientific articles.

28 January 2023 – 28 March 2024

Guest Editor of the Special Issue entitled "Drug Safety and Relevant Issues in the Real-World" for the international journal Pharmaceuticals.

The Special Issue resulted in the publication of an Editorial based on thirteen peer-reviewed open-access articles.

From 1 July 2023 – Present

Review Editor for the "Pharmacology of Anti-Cancer Drugs" section of the international journal Frontiers in Pharmacology.

PARTICIPATION IN SCIENTIFIC MEETINGS AND CONGRESSES

Participation in the 38th National Congress of the Italian Society of Pharmacology (SIF), "Drugs, Health and Quality of Life", held in Rimini, Italy, 25–28 October 2017.

Participation in the SIF Monothematic Meeting "New and Old Challenges for Clinical Pharmacology: From Therapeutic Drug Monitoring to Pharmacogenetics and Pharmacovigilance", held in Naples, Italy, 15–16 March 2018.

Participation in the 18th National Congress of the Italian Society of Toxicology (SITOX), "Innovation, Safety and Sustainability in the 4.0 Era", held in Bologna, Italy, 10–13 April 2018.

Participation in the conference "Nutraceuticals, Nutrition and Health – Focus on Health During Pregnancy", held at the Great Hall of the Rectorate, University of Messina, Messina, Italy, 11–12 May 2018.

Participation in the 3rd Congress "The Role of Real-World Evidence in Supporting Drug Policies: Institutions and the Scientific Community in Dialogue", held at the Congress Centre of the University Hospital "G. Martino", Messina, Italy, 12–13 July 2018.

Participation in the 18th Annual Meeting of the International Society of Pharmacovigilance (IsoP), "Pharmacovigilance Without Borders", held in Geneva, Switzerland, 11–14 November 2018.

Participation in the 4th Congress "The Role of Real-World Evidence in Supporting Drug Policies: From Big Data to Artificial Intelligence and Digital Therapeutics", held at the Great Hall of the Rectorate, University of Messina, Messina, Italy, 18–19 July 2019.

Participation in the 2nd Conference “Nutraceuticals, Nutrition and Health – Focus on Pain Management with Nutraceutical Products”, held at the Great Hall of the Rectorate, University of Messina, Messina, Italy, 4–5 October 2019.

Participation in the 22nd SIF Seminar on Pharmacology for PhD Students, Fellows, Postdoctoral Researchers and Specialist Trainees, held in Florence, Italy, 19–20 November 2019.

Participation in the 39th National Congress of the Italian Society of Pharmacology (SIF), “Research, Innovation, Sustainability, Appropriateness and Education”, held in Florence, Italy, 20–23 November 2019.

Participation in the 23rd SIF Seminar on Pharmacology for PhD Students, Fellows, Postdoctoral Researchers and Specialist Trainees, held online, 8 March 2021.

Participation in the 40th National Congress of the Italian Society of Pharmacology (SIF), “The Scientific Value and the Appropriate Use of Medicines”, held online, 9–13 March 2021.

Participation in the 15th World Congress on Inflammation, held in Rome, Italy, 5–8 June 2022.

Participation in the 21st Annual Meeting of the International Society of Pharmacovigilance (IsoP), “A New Era of Pharmacovigilance: Challenges and Opportunities”, held in Verona, Italy, 20–23 September 2022.

Participation in the workshop “Immune-Mediated Inflammatory Diseases in Older Adults”, held in Giardini Naxos (Messina), Italy, 28–29 October 2022.

Participation in the 24th SIF Seminar on Pharmacology for PhD Students, Fellows, Postdoctoral Researchers and Specialist Trainees, held in Rome, Italy, 15–16 November 2022.

Participation in the 41st National Congress of the Italian Society of Pharmacology (SIF), “The Scientific Value and Appropriate Use of Medicines”, held in Rome, Italy, 15–19 November 2022.

Participation in the SIF Monothematic Meeting “Pharmacovigilance of Biological Medicines, Including Biosimilars, in Chronic Inflammatory Dermatological, Onco-Hematological, Gastroenterological and Rheumatological Diseases: Clinical Practice Experience”, held at the “Magna Graecia” University of Catanzaro, Catanzaro, Italy, 16–17 May 2024.

Participation in the 42nd National Congress of the Italian Society of Pharmacology (SIF), "Science Today for a Better Medicine Tomorrow", held in Sorrento (Naples), Italy, 13–16 November 2024.

Participation in the SIF Monothematic Meeting "Medical Use of Cannabis and Pharmacology of the Endocannabinoid System", held in Messina, Italy, 10–11 October 2025.

Participation in the congress "Inflammatory-Based Diseases, Neurodegeneration and Metabolic Disorders: From Bench to Bedside", held in Messina, Italy, 22–23 January 2026.

PARTICIPATION IN ECM COURSES

Participation in the course “Management of Chronic Inflammatory Bowel Diseases”, organized by the Italian National Institute of Health (Istituto Superiore di Sanità), with the acquisition of 16 CME (ECM) credits, completed on 7 August 2025.

Participation in the course “Safe Administration of Influenza and COVID-19 Vaccines in Community Pharmacies (Third Edition)”, organized by the Italian National Institute of Health (Istituto Superiore di Sanità), with the acquisition of 20.8 CME (ECM) credits, completed on 6 August 2025.

Participation in the course “Community Care and Life Projects: The Health Budget (4th Edition)”, organized by the Italian National Institute of Health (Istituto Superiore di Sanità), with the acquisition of 32 CME (ECM) credits, completed on 6 August 2025.

Participation in the course “Navigating PubMed – Third Edition”, organized by the Italian National Institute of Health (Istituto Superiore di Sanità), with the acquisition of 16 CME (ECM) credits, completed on 1 August 2025.

Participation in the asynchronous distance-learning (FAD) course “Multidrug-Resistant (MDR) Infections: New Diagnostic and Therapeutic Approaches”, organized by I&C S.r.l., with the acquisition of 8 CME (ECM) credits, completed on 5 February 2025.

Participation in the FAD course “Pre-vaccination Triage for COVID-19 and Influenza Vaccination in Community Pharmacies”, organized by the Federation of Italian Pharmacists’ Associations (FOFI), with the acquisition of 7.2 CME (ECM) credits, completed on 29 March 2022.

Participation in the FAD course “SARS-CoV-2: Viral Evolution, Vaccination Campaign, Therapies, Home Care and Variants”, organized by FOFI, with the acquisition of 7.8 CME (ECM) credits, completed on 29 March 2022.

Participation in the FAD course “Medical Devices and Regulation (EU) 2017/745: What Pharmacists Need to Know”, organized by FOFI, with the acquisition of 4.5 CME (ECM) credits, completed on 29 March 2022.

Participation in the FAD course “Introduction to the Prevention and Control of Healthcare-Associated Infections: Organizational Aspects, Prevention, Surveillance and Control”, organized by the Italian National Institute of Health (Istituto Superiore di Sanità) and the Friuli Centrale University Health Authority, with the acquisition of 16 CME (ECM) credits, completed on 26 March 2022.

Participation in the FAD course “Introduction to the Prevention and Control of Healthcare-Associated Infections: Healthcare-Associated Infections and Antimicrobial Resistance”, organized by the Italian National Institute of Health (Istituto Superiore di Sanità) and the Friuli Centrale University Health Authority, with the acquisition of 16 CME (ECM) credits, completed on 26 March 2022.

Participation in the course “COPD: New Diagnostic and Therapeutic Scenarios Following the Introduction of AIFA Note 99”, organized by ECM Club, with the acquisition of 4.5 CME (ECM) credits, completed on 24 March 2022.

Participation in the FAD course “The Complex Patient: Management and Continuity of Care in the Community Between Appropriateness and Sustainability During the SARS-CoV-2 Pandemic”, organized by AGENAS and accredited by Eureka S.r.l., with the acquisition of 28.6 CME (ECM) credits, completed on 24 March 2022.

Participation in the course “COVID-19 Vaccination Campaign: Safe Administration of the SARS-CoV-2/COVID-19 Vaccine (Second Edition)”, organized by the Italian National Institute of Health (Istituto Superiore di Sanità).

Participation in the course “COVID-19 Vaccination Campaign: Safe Administration of the SARS-CoV-2/COVID-19 Vaccine”, organized by the Italian National Institute of Health (Istituto Superiore di Sanità), with the acquisition of 20.8 CME (ECM) credits.

PARTICIPATION IN OTHER SCIENTIFIC EVENTS

Participation in the course “Introduction to Medical Statistics for Clinical Research”, held in Bologna, Italy, on 28–29 January 2019, with the acquisition of 24 CME (ECM) credits.

Participation in the "NextGen Pharmacology Lab", organized by Dompé and The Bloc, held in Rome, Italy, on 16–17 March 2026.

Participation in the Periodic Training Course for Pharmacovigilance Monitors, entitled "Adverse Drug Reactions in Vulnerable Populations", held at the Congress Centre, Main Lecture Hall, University Hospital "G. Martino", Messina, Italy, on 21 November 2024.

Participation in the course "Pharmacoepidemiology: Evidence Synthesis, Data Sources, and Study Design", offered by the Graduate School of Health and Medical Sciences, University of Copenhagen, completed on 10 November 2023.

Participation in the advanced course "4EU+ PharmacoEpi (Advanced Course): An Integrated 4EU+ Pharmacoepidemiology Educational Course", organized by the Institut Pierre Louis d'Épidémiologie et de Santé Publique (INSERM), Sorbonne Université – Paris, and completed in Heidelberg, Germany, on 10 May 2024.

Participation in the web workshop "Promoting Spontaneous Reporting of Adverse Drug Reactions: Sharing Experiences", organized by the International Society of Pharmacovigilance (ISoP), held online on 17 May 2023.

Participation in the course "Major Depression and Treatment-Resistant Depression: From Pharmacology to Clinical Practice", organized by the University Hospital "G. Martino", held at the Congress Centre of the University Hospital "G. Martino", Messina, Italy, on 5 May 2022.

Participation in the e-learning course "Statistical Reasoning and Algorithms in Pharmacovigilance", organized by the Uppsala Monitoring Centre (WHO), completed on 22 February 2022.

Participation in the e-learning course "Signal Assessment", organized by the Uppsala Monitoring Centre (WHO), completed on 17 February 2022.

Participation in the seminar by Prof. Joseph Kissil, "The Nature and Hallmarks of Cancer", held at the University of Messina, on 3 May 2022.

Participation in the seminar by Prof. Joseph Kissil, "Early-Stage Discovery and Development of Drug Candidates", held at the University of Messina, on 9 May 2022.

Participation in the seminar by Prof. Leandro Castellano, "The Role of Non-Coding RNAs in Cancer and Their Potential Use as Biomarkers or Therapeutic Drug Targets", held at the University of Messina, on 10 May 2022.

Participation in the seminar "A Quantitative View on Cell Migration: Speed and Persistence – A Correlation Story", organized by the University of Messina and the AIRC Foundation, held in Messina, Italy, on 2 May 2022.

PERSONAL SKILLS

NATIVE LANGUAGE	**ITALIAN**
OTHER LANGUAGE	
	ENGLISH
• Reading	EXCELLENT
• Writing	EXCELLENT
• Speaking	EXCELLENT

COMMUNICATION AND INTERPERSONAL SKILLS

- Excellent communication skills, active listening abilities, and strong patience.
- Excellent communication skills acquired through the presentation of oral communications at scientific meetings and conferences.
- Excellent communication and interpersonal skills developed through my experience as a member of the Executive Board of the Italian Society of Pharmacology – Early Career Pharmacologists Group (SIF-ECPG).
- Excellent communication and interpersonal skills acquired during my research fellowship activities in the Child and Adolescent Neuropsychiatry, Gastroenterology, Dermatology, and Rheumatology Units of the University Hospital "G. Martino", Messina.
- Excellent communication and interpersonal skills acquired through my involvement as a pharmacist participating in the COVID-19 vaccination campaign during the pandemic.
- Excellent communication skills developed through my experience as Student Representative on the Degree Programme Board in Pharmacy and on the Department Board of Pharmaceutical Sciences and Health Products.
- Excellent interpersonal skills acquired through my experience as a volunteer with the Italian Multiple Sclerosis Association (AISM).
- Excellent communication and interpersonal skills acquired through my experience within a non-partisan civic association.

ORGANIZATIONAL SKILLS

- Strong attention to detail and excellent organizational skills in both professional and personal settings.
- Ability to work independently and efficiently, successfully completing assigned tasks even under pressure.
- Ability to organize and coordinate cohesive multidisciplinary teams with clearly defined roles in order to achieve established objectives effectively.

TECHNICAL SKILLS

- IBM SPSS (Statistical Package for the Social Sciences): excellent knowledge and proficiency.
- R and RStudio: excellent knowledge and proficiency.
- Microsoft Office Suite (Word, PowerPoint, Excel, Access): excellent knowledge and proficiency.
- Internet and e-mail applications: excellent knowledge and proficiency.
- Operating Systems: Microsoft Windows and macOS.
- European Computer Driving Licence (ECDL).

DRIVING LICENCE Category B driving licence. Own vehicle available.