



UNIVERSITÀ DEGLI STUDI
"GABRIELE d'ANNUNZIO"
CHIETI - PESCARA



DIPARTIMENTO DI FARMACIA

Relazione Assegno di Ricerca GSD 03/CHEM-08, SSD CHEM-08/A

**"Sviluppo di nuove formulazioni di acido ialuronico contenenti derivati
monoterpenoidi per il trattamento e la rigenerazione dei tessuti delle infezioni
cutanee causate da batteri resistenti agli antibiotici"**

Dott.ssa Marilisa Pia Dimmito

Tutor: Prof. Antonio Di Stefano

Settore scientifico-disciplinare: CHEM-08/A



During the period of her Research Fellowship at the Department of Pharmacy of the University “G. d’Annunzio” of Chieti-Pescara, from 15th April 2025 to 15th April 2026, Dr. Marilisa Pia Dimmito’s research activity was focused on the design and development of novel hyaluronic acid-based polymers intended to promote tissue regeneration. The research activities carried out during the aforementioned period will be described as outlined below:

ORAL COMMUNICATIONS TO CONGRESSES

- 27th February 2026, Invited Speaker – titled “Engineered Polymer Systems for Tissue Regeneration: Pharmaceutical Perspectives”, held in Atatürk University, Erzurum, Turkey.
- 22nd October 2025, Invited Oral Presentation - 2nd International Congress on Medicinal Chemistry, Drug Discovery & Drug Delivery, titled “*Peptide-Based Delivery Platforms: From Self-Assembling Hydrogels to Brain-Targeted Nanocarriers*”, (25 min) held in Nice, France.
- 13th September 2025, Oral Presentation - 13th Edition of Global Conference on Pharmaceuticals and Novel Drug Delivery Systems, titled: “*From self-assembly to healing: Engineering ultra-small peptides into supramolecular hydrogels for controlled drug release*”, (25 min) held in Valencia, Spain.

POSTER PRESENTATIONS TO CONGRESSES

- 1st-3rd October 2025, 5th Conference on Innovation in Drug Delivery, titled: “*Nanoencapsulation of propolis in solid lipid nanoparticles for targeted management of inflammatory bowel diseases*”, Torino, Italy.
- 11-13th June 2025, 64° SIMPOSIO AFI, dalla conoscenza alla digitalizzazione per la competitività dell’industria della salute, titled: “*Development of a multi-component dietary supplement for fibromyalgia: in vitro evidence of neuroprotective, antioxidant, and anti-inflammatory activities*”. Rimini, Italy.
- 15-17th May 2025, bioinspired Therapeutics: upcoming promise or new challenges for design and characterization? CRS Italy Workshop 2025, titled: “*Chitosan nanoparticles for the delivery of terpenoid prodrugs in inflammatory bowel diseases (IBD)*”. Bari, Italy.

SCIENTIFIC PUBLICATIONS

- P1.** M.P. Dimmito, V. Puca, A. Di Stefano, E.C. Toto, G. Corfiati, M. Appignani, R. Grande, B. Marinacci, M. Gallorini, S. Francati, I. Robuffo, I. Cacciatore, L. Marinelli. “Propolis-Loaded Solid Lipid Nanoparticles Targeting Pathogens Associated with Gastro-intestinal Diseases”, submitted to Journal of Functional Foods.
- P2.** Turkez, H., Oner, S., Yıldırım, O. C., Arslan, M. E., Dimmito, M. P., Kahraman, Ç. Y., Marinelli, L., Sonmez, E., Kiki, Ö., Tatar, A., Cacciatore, I., Di Stefano, A., & Mardinoglu, A. Synthesis and Characterization of Memantine-Loaded Niosomes for Enhanced Alzheimer’s Disease Targeting. *Pharmaceutics*, **2025**, 17(2), 267. <https://doi.org/10.3390/pharmaceutics17020267>.
- P3.** M.P. Dimmito, E.C. Toto, L. Marinelli, G. Di Biase, I. Cacciatore, P. Toto, M. Ciulla, F. Santoleri, A. Costantini, A. Di Stefano. A Methodological Proposal for Health Technology Assessments: A Case Study on Biosimilar Drugs. *J. Mark. Access Health Policy*. **2025**, 13, 12. <https://doi.org/10.3390/jmahp13020012>.



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INTERNATIONAL PARTNERSHIPS

- 25th February- 3rd March 2026: Visiting Researcher Medical Biology Department, Faculty of Medicine, Atatürk University, Erzurum, Turkey.

FINANCIAL SUPPORT FOR RESEARCH ACTIVITIES

- 12-month preclinical research contract with Dompé Farmaceutici (Scientific Supervisor for third-party service): *“Formulation of lipophilic ointments and oil-based eye drops with NGF via OLP-fatty acid platform and development of ready-to-use ocular formulations for other APIs”*. (Contract approved by the Department Council on September 18th, 2025). Amount: €50,000 + VAT. From 01st October 2025 to 31th December 2025.

DIDACTIC ACTIVITIES

- 10th January - 31st December 2026, continuing education and open teaching: “DPR 309/90 NELLA PRATICA QUOTIDIANA DEL FARMACISTA”. Awarded 15 ECM credits by UTIFAR.
- 1st October 2025 - to date, formal attribution of 3 ECTS for the module “Advanced Pharmaceutical Technology”, Aldent University, Tirana, Albania.
- 18th July 2025 - 25th July 25, 2025, teaching activities for the SSD CHEM-08/A, consisting of 8 hours of lectures on the topic “Innovative Formulations of Biopharmaceuticals and Formulation of Monoclonal Antibodies” for PhD candidates of the 38th, 39th, and 40th cycles of the PhD Program in Medical Biotechnology, Department of Neuroscience, Imaging and Clinical Sciences, University of “G. d’Annunzio” Chieti-Pescara. Coordinator: Prof. Stefania Fulle.
- 28th May 2025 - to date, as part of the 2025-26 academic year teaching plan, formal assignment of 2 ECTS for the course Pharmaceutical Technology and Legislation with Laboratory (SSD CHEM-08/A) for the Degree Course in Pharmaceutical Chemistry and Technology (CTF) at the Department of Pharmacy, “G. d’Annunzio” University of Chieti-Pescara. Course held by Professor Antonio Di Stefano.
- 5th February 2025 – 31st December 2025, continuing education and open teaching: “Equivalent and Biosimilar Medicines: Regulatory and Pharmacoeconomic Aspects”. 20 ECM credits by UTIFAR.
- 5th February 2025 - 31st December 2025, continuing education and open teaching: “Biotechnological Drugs: Classification, Production, and Use”. 22 ECM credits by UTIFAR.
- 3rd March 2025 - 31st December 2025, continuing education and open teaching: “Fundamental Basics of Galenics in Pharmacy”. 12 ECM credits by UTIFAR.



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DISSEMINATION ACTIVITIES

- 23rd October 2025, Coordination of the workshop entitled: "Medicine Shortages and Pharmaceutical Supply Chains: Impacts and Employment Prospects for Graduates in Pharmacy and Pharmaceutical Chemistry and Technology (CTF)." Speakers: Dr. Domenico Di Giorgio, Head of the Office of Product Quality and Combating Pharmaceutical Crime (AIFA); Dr. Andrea Mandelli, President of the Federation of the Orders of Pharmacists (FOFI); Dr. Giovanna Pescatore, Pharmacovigilance Sector, Farmindustria. Proponents: Prof. Antonio Di Stefano, Prof. Ivana Cacciatore, Prof. Lisa Marinelli, Dr. Marilisa Pia Dimmito, Dr. Eleonora Chiara Toto.
- 14th April 2025 - 14th April 2025, organization of the event "*Eco-Pharmacovigilance: What Relationship Between Pharmaceuticals and the Environment?*", as the proposing party, in collaboration with Professors Antonio Di Stefano, Ivana Cacciatore, and Lisa Marinelli. This activity is part of the initiatives related to the UN 2030 Agenda and the Sustainable Development Goals (SDGs). Goal 12: ensure sustainable consumption and production patterns.
- 12th May 2025 - 12th May 2025, organization of the event "*Environmental Threats: Watch or Intervene?*", as the proposing party, in collaboration with Professors Antonio Di Stefano, Ivana Cacciatore, and Lisa Marinelli. This activity is part of the initiatives related to the UN 2030 Agenda and the Sustainable Development Goals (SDGs). Goal 12: ensure sustainable consumption and production patterns.
- 13th May 2025 - 13th May 2025, organization of the event "New Applications at SCIEX", as the proposing party, in collaboration with Professors Antonio Di Stefano, Ivana Cacciatore, and Lisa Marinelli.

EDITORIAL ACTIVITY

- 30th January 2023 to 20th March 2025, guest Editor for the journal *International Journal of Molecular Sciences* for the Special Issue titled "*Nanotechnology in Targeted Drug Delivery 2.0*", ISSN 1422-0067, a journal indexed in SCOPUS.
- 15th March 2024 to 15th March 2025, guest Editor for the journal *Microorganisms* for the Special Issue titled "*Antimicrobial and Antibiofilm Potentials of Plant Extracts, Natural Products and Their Formulations*", ISSN 2076-2607, a journal indexed in SCOPUS.
- 27th June 2025 to date, editorial Board Member for the journal *Letters in Drug Design & Discovery*, ISSN: 1570-1808, e-ISSN: 1875-628X, a journal indexed in SCOPUS.

DICHIARAZIONE SOSTITUTIVA DI CERTIFICAZIONE
(art. 46 D.P.R. n. 445/2000)
DICHIARAZIONE SOSTITUTIVA ATTO DI NOTORIETÀ
(art. 19 e 47 D.P.R. n. 445/2000)

La sottoscritta Marilisa Pia Dimmito, consapevole che le dichiarazioni mendaci sono punite ai sensi degli artt. 483, 495, 496 del Codice penale e delle leggi speciali in materia

DICHIARA

che le informazioni riportate nel seguente documento corrispondono al vero

Chieti, 5th March 2026

Firma