

Curriculum vitae Anna Maria Papini, PhD

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Education and Scientific Graduation

1977-1983: Italian "Laurea" in Chemistry, *Curriculum Organic Chemistry & Chemical Biology of the University of Florence (Italy)*. Title of the "Laurea" thesis: *Regioselective functionalisation of cyclic ethers and thioethers: synthesis of bifunctional derivatives via IVB organometallic compounds*".

1985-1989: International Ph.D. in Chemical Biology of the Italian Ministry of Education Title of the PhD thesis (fellowship of the Italian Ministry of Education) performed in 1985-1986 at the Department of Biochemistry, University of Sherbrooke, Québec, Mentor Prof. Dr. Gilles Dupuis; in 1986-1988 at the Dept. of Organic Chemistry, University of Florence, Mentor: Prof. Gianfranco. Rapi and in 1988-1989 at the Department of Peptide Chemistry, Max Planck Institute für Biochemie, Martinsried Bei Muenchen, Mentor Prof. Dr. Luis Moroder. Title of the PhD thesis: "Synthesis of peptides for chemical, bio-pharmacological and immunological studies". Tutor: Prof. Luis Moroder.

1990: Specialisation in Dermatochemistry, Dermatological Department of the Florence University Hospital. Supervisor Pr. M.D. E. Panconesi.

Since 2013: Habilitation to the function of Full Professor of Organic Chemistry of the Italian Universities.

Since 2001: Habilitation to the function of Full Professor of Organic Chemistry of the French Universities.

Professional appointments

Since March 1, 2020: Appointed Full Professor of Organic Chemistry at the Department of Chemistry "Ugo Schiff" of the University of Florence (Italy).

2008-2020: Appointed Full Professor with the "Chaire d'Excellence" of the French "Agence Nationale de la Recherche" (ANR-09-CEXC-013-01), Section 32 (Chimie Organique Minérale et Industrielle) of the Université Paris-Seine, now CY Cergy Paris University (France). Detached to the University of Florence on September 2020 for 5 years (Article 14-6 of the Law of French Universities).

2017-2020: Associated to the CNR Institute of Crystallography (www.ic.cnr.it/ic4/en/).

2001: Awarded Full Professor of Organic Chemistry at the Claude Bernard University Lyon 1 (France). Waiver.

2002-2020: Associate Professor of Organic Chemistry and Chair of Bioorganic Chemistry at the Department of Organic Chemistry and since 2011 Department of Chemistry "Ugo Schiff" of the University of Florence.

2001-2002: Researcher of Organic Chemistry at the Department of Organic Chemistry, University of Florence.

1991-2001: Assistant Researcher at the Department of Organic Chemistry of the University of Florence, associated to the Chair of Chemistry for the Medical School.

Since 2004 to date: Co-founder and director of the Interdepartmental Research Unit of Peptide & Protein Chemistry & Biology at the Scientific campus of the University of Florence, associating the Departments of Chemistry and NeuroFarBa (Section of Pharmaceutical Sciences) of the University of Florence (Italy) (PeptLab@UNIFI).

2013-2020: Founder and director of the French-Italian Interdepartmental Research Unit of Peptide & Protein Chemistry & Biology associating PeptLab@UNIFI and of the Platform PeptLab@UCP at the Université Paris-Seine, Cergy-Pontoise, now CY Cergy Paris Université (France).

[PeptLab](http://www.peptlab.unifi.it) and FIS – Fabbrica Italiana Sintetici Spa (Vicenza) for technology transfer of large-scale MW-assisted peptide synthesis aimed to validation of a GMP plant in Vicenza.

Since 2016: Founder and Director of the Laboratory Molecular Diagnostics & Life funded by EU-Region Toscana to support R&D in diagnostics in SMEs.

Academic Roles and Responsibilities

2022-2025: Elected Vice-Dean of the School of Mathematical, Physical, and Natural Sciences (SMFN) of the University of Florence (Italy).

2021-2027: Elected and confirmed for a second term, Director of the PhD Program in Chemical Sciences of the University of Florence ([PhD Chemical Sciences@UNIFI](mailto:PhD_Chemical_Sciences@UNIFI)).

Since 2013: Delegate of the International Affairs of the School of Mathematical, Physical, and Natural Sciences (SMFN) of the University of Florence (Italy) and Responsible of the Erasmus + Exchanges Programs for Study and Traineeship of the students incoming and outgoing (ca. 300 students/year) of the School of SMFN (Physics, Chemistry, Mathematics, Informatics, Biological and Natural Sciences, Earth sciences, Optics, Biotechnology, Cultural Heritage). Responsible of the Erasmus + Exchanges Programs for Staff Teaching and Administrative Mobility worldwide.

Since December 2020: Elected member of the Board of the School of SMFN to represent the Department of Chemistry "Ugo Schiff" of the University of Florence.

Since 2018: Member of the Teaching Committee for the BSc and MSc Course in Chemistry of the University of Florence

Since 2016: Responsible of the foreign internship for the BSc and MSc Course in Chemistry of the University of Florence

Since 2019 Coordinator of the foreign internship for the MSc students in Advanced Molecular Sciences of the University of Florence

2010-2014: Delegate of the Faculty of Sciences in the Board of the Foreign Language Centre (CLA - Centro Linguistico d'Ateneo) of the University of Florence

2006-2016: Vice President and Delegate for Chemistry in the Board of OpenLab (Educational program of the Faculty of Sciences of the University of Florence).

Since 2010: Member of the Board of the PhD School in Chemical Sciences of the University of Florence.

2006-2009: Member of the Board of the PhD School in Non-linear systems and complex dynamics of the University of Florence.

Since 2005: Coordinator of the Erasmus Program of Chemistry of the Faculty of Sciences of the University of Florence (Italy). Responsible of Erasmus Exchange Programs for Study and Traineeship of the students of Chemistry Degrees (B.Sc., M.Sc., PhD).

2012: Member of the Committee for the selection of TFA A059 (Educational Trainings for teachers of chemistry in high schools).

2011: Representative of the Department of Chemistry of the University of Florence in the Pole of innovation for life sciences ("Polo d'Innovazione per le Scienze della Vita").

2006-2016: Vice President and Delegate for Chemistry in the Board of OpenLab (Educational program of the Faculty of Sciences of the University of Florence).

Awards for the scientific activity

2024: Barry Cohen Prize for Medicinal Chemistry/Chemical Biology attributed by the Israel Chemical Society. The prize was delivered on July 18, 2024 at the Weizmann Institute of Science, Rehovot, after presenting a keynote lecture titled: "From chemical immunology to medicinal chemistry: the power of peptides to elucidate the mystery of molecular mimicry".

2019-2021: Rita Levi Montalcini Prize for the binational Italian-Israeli Cooperation for the project "Role of glycopeptides in immune-mediated diseases". 4-Month scientific visits in Israel: Azrieli Faculty of Medicine, Bar Ilan University, Safed (Prof. Nir Qvit); Department of Immunology, Weizmann Institute of Sciences, Rehovot (Dr. Rina Aharoni and Prof. Ruth Arnon); Institute of Chemistry, The Hebrew University of Jerusalem, Jerusalem (Dr. Mattan Hurevich, Prof. Assaf Friedler, and Prof. Shlomo Yitzchaik).

2009-2013: *Chaire d'excellence* of the French *Agence Nationale de la Recherche* (unique of chemistry out of 16 attributed in 2009), ANR-09-CEXC-013-01, Project "PepKit : Development of peptide-based-diagnostic kits for autoimmune diseases".

2008: Leonidas Zervas Award for outstanding contribution to peptide chemistry, 30th EPS, Helsinki (Finland), August 31, 2008.

2008: 1st D. Theodoropoulos Memorial Lecture Award for outstanding achievements in Peptide Sciences, 6th Hellenic Forum on Bioactive Peptides, Patras (Greece), May 18, 2008.

2006: Best Poster Award Lucio Senatore, XXII Congresso Nazionale della Società Chimica Italiana [V. Volkov, F. Nuti, Y.Takaoka, R. Chelli, A.M. Papini, and R. Righini. Structure and bonding of water molecules in the polar region of phospholipid membrane investigated by two-dimensional IR spectroscopy and MD computer simulation. XXII Congresso Nazionale della Società Chimica Italiana, Firenze, September 10-15, 2006, Abstract FIS-P-135] attributed to the work performed with the Postdoc student F. Nuti and of the coworker R. Chelli.

2005: Bert Schram Price. Honorable Mention, 19th American Peptide Symposium, San Diego, California, USA [B. Mulinacci, C. Breithaupt, P.P. Pal, N. Budisa, M. Pazzagli, B. Mazzanti, P. Rovero, L. Moroder, and A.M. Papini. Cross-reactivity studies of rMOGED with the synthetic putative autoantigen CSF114(Glc) and [N31(Glc)]hMOG(30-50) in Multiple Sclerosis patient sera. 19th American Peptide Symposium (San Diego, CA, USA), June 18-24, 2005, LY 03, Abstract p. 484] attributed to the work performed with the PhD student B. Mulinacci.

2005: Best Poster Award Glycoconjugates "Glyco XVIII", Florence, Italy [F. Nuti, I. Paolini, B.Mulinacci, M. Pazzagli, F. Lolli, M. Chelli, P. Rovero, and A.M. Papini. Sugar-scan of CSF114(Glc) for autoantibody recognition in Multiple Sclerosis. XVIII International Symposium on Glycoconjugates. Glyco XVIII", Firenze, September 4-9, 2005, Abstract P057, Glycoconjugate J., 2005, 22(4-6), 254] attributed to the work performed with the PhD student F. Nuti.

1999: Bruce W. Erickson Award for outstanding achievement in peptide sciences, 16th American Peptide Symposium, Minneapolis, Minnesota, USA [E. Nardi, S. Mazzucco, S. Matà, M. Chelli, B. Mazzanti, E. Traggiari, M. Ginanneschi, F. Pinto, L. Massacesi, M. Vergelli, H. Kalbacher, F. Lolli and A.M. Papini. Influence of different N-linked glycosyl moiety at position 31 of hMOG(30-50) on anti-MOG antibody recognition in multiple sclerosis patients. 16th American Peptide Symposium, Minneapolis (Minnesota, USA), June 26-July 1, 1999, Abstract P148] attributed to the work performed with the PhD student E. Nardi.

Technology transfer activity

Since June 1 2023: Winner in collaboration with University of Cologne (coordinator Prof. Ines Neundorf), Semmelweis University (Prof. Istvan Mandity), University of Birmingham (Dr. Helen Hook) of 5th EUniWell Seed Funding Call (SFC5) to implement the project TTPep - Peptides for Well-being (Technology Transfer of Peptides for the Well-being Economy) to promote peptides, educating new generations in this emerging field of natural molecules with high impact for health and well-being. Specific laboratory training courses, seminars and networking workshops will develop knowledge in peptides to be translated in diagnostics, therapeutics, cosmeceuticals in a circular economy perspective.

2017-2020: Founder and Scientific Coordinator of PeptFarm, joint laboratory between PeptLab at the University of Florence and Fabbrica Italiana Sintetici, F.I.S. S.p.a. (Vicenza, Italy) to transfer the technology for GMP large-scale synthesis of active pharmaceutical peptide drugs ([OPRD-1](#), [OPRD-2](#)).

2020-2023: Technology transfer of a peptide-based blocking collagen degradation, IP of AM Papini's group to RELIFE by Menarini group. The product as first-in-class anti-aging DEFINISSE KP1 has been launched on the market on September 23, 2023.

2010: Founder of the facility for large-scale peptide synthesis at CY Cergy Paris Université (1.5 MioEuro funded by the Region Ile de France), aimed to technology transfer to SMEs.

Since 2016: Founder and Director of the Toscana EU-Region technology transfer Laboratory of Molecular Diagnostics and Life Sciences (MoD&LS) aimed to R&D of peptide-based diagnostics.

2016: Founder and member of the Board of the start-up company Apotech S.r.l. for R&D of peptide-based cosmeceuticals that developed KP1 as anti-aging cream based on a peptide analog of Serpin A1, inhibitor of collagen degradation. The cream is commercialized by Apotech S.r.l.

Since 2014: Member of the Scientific Advisory Board of Regulaxis (www.regulaxis.com).

2007-2016: Founder & Chief Scientific Officer of the startup Toscana Biomarkers S.r.l. whose mission was R&D of peptide-based diagnostics of autoimmune diseases. Toscana Biomarkers IP was licensed to European IVD producers: Diametra (Milano, Italy), Theradiag (Paris, France).

Since 2003: Founder and member of the Board of EspiKem, 1st spinoff of the University of Florence, presently acting as CRO selling custom peptides for research.

Awards for the technology transfer activity

2009: Vespucci Award for founding the startup Toscana Biomarkers S.r.l.
2008: Frost & Sullivan Excellence in Research Award in the European autoimmune disease diagnostics market presented to A.M. Papini for the start-up Toscana Biomarkers S.r.l.
2006: Start-Cup for the business plan of the start-up Toscana Biomarkers S.r.l.
2004: Vespucci Award, Research & Ethical Innovation to A.M. Papini as inventor of the PCT (2003) WO 03000733 A2.

Recent Research Funding as Principal Investigator

2023-2026: Italian Ministry of Health, Project RF-2021-12374177: Title: "Persistence and magnitude of adaptive immune response to anti-SARS-CoV-2 vaccine, including assessment of cross reaction to virus variants, in healthy children and in immunocompromised paediatric and adult patients: implication for vaccination strategy". Total funding €450.000,00: National PI F. Annunziato, Regione Toscana, AOU Careggi/SOD Centro Diagnostico di Citofluorimetria e Immunoterapia (Enrolment of immunocompromised adult patients and flow cytometric analysis of spike specific B and T cells of all patients of the project); Coordinator OU3 for Department of Chemistry, Ugo Schiff (DICUS)/Interdepartmental Research Unit of Peptide & Protein Chemistry & Biology (PeptLab@UNIFI), University of Florence: A.M. Papini (Synthesis of peptides of SARS-CoV-2 spike protein, both wild type and mutated); Coordinator OU2 for AOU Meyer, Dipartimento Specialistico Interdisciplinare: M. Resti (Enrolment of paediatric patients, both healthy and immunocompromised ones, and quantification of SARS-CoV-2 specific Ig serum levels).

2022-2025: Principal Investigator PNRR Project THE - TUSCANY HEALTH ECOSYSTEM (CUP B83C22003920001). Title: Development of diagnostic technologies based on synthetic modified peptide ("Synthetic Antigenic Probes, SAPs) to detect and characterize auto-antibodies as biomarkers of immune responses. € 61.000,00 (PhD fellowship) + 36.000,00 (materials)

2020-2026: Principal Investigator project "Mother and Infant dyads: Lowering the impact of endocrine disrupting Chemicals in milk for a Healthy Life" LIFE18 ENV/IT/000460 "life MILCH". Total cost of the project for the University of Florence € 711.028 (UNIFI will contribute with € 326.150 of own financial resources and will receive from the coordinating beneficiary a maximum amount of € 384.878).

2021-2022: "Regione Toscana POR FESR 2014-2020" R&D of SMEs. ECO-SMART DEGREASING SYSTEM 4.0. Total cost of the project € 1.497.849,55 (UNIFI € 204.700,00).

2017-2019: "Regione Toscana POR CReO FESR 2014-2020". EcoReLabel: Ecological removable and recyclable labels. € 303.000,00.

2010-2012: "Regione Toscana POR CReO FESR 2007-2013". MARK: Identification of diagnostic biomarkers of autoimmune diseases. € 450.000,00.

2005-2011: "Fondazione Cassa di Risparmio di Firenze". Molecular characterisation of peptide-protein interaction in autoimmune diseases. 1.500.000 Euro for PeptLab at the University of Florence.

2005-2007: International FIRB - Italian Ministry of University & Research and Harvard Medical School. € 350.000,00.

2002-2003, 2005-2006, 2008-2009: PRIN-Italian Ministry of University & Research. Design, synthesis & immunological characterisation of modified peptides to follow up autoimmune diseases. € 700.000,00.

2009-2014: "Chaire d'Excellence" (ANR-09-CEXC-013-01). PepKit: Development of peptide-based-diagnostic kits for autoimmune diseases. € 999.998,00 for the PeptLab@UCP platform at Université Paris-Seine, Cergy-Pontoise (France).

2018: Région Ile de France, funding dedicated to launch the large-scale facility KgPeptLab@UCP at Université Paris-Seine, Neuville site, Cergy Pontoise (France). € 1.50000.000,00.

2016-2018: Lauréate MRSEI-ANR Edition 2015, EU Project REDIPOC to organize and submit a FET-OPEN project for a Reliable Diagnostic Point Of Care Network. € 20.000.

2013-2016: PhD grant by ANRT Thèse CIFRE in cooperation with REGULAXIS. € 90.000.

2015-2018: BIRAC, Indo-French Challenge-oriented Call for proposals 2014. "AMIR-PepKit IVD, R&D of a peptide-based-diagnostic kit for an early detection of a fatal immune response in acute myocardial infarction patients". € 50.000,00.

2011-2013: Fondation Pierre-Gilles de Gennes. "Immune-mediated diseases: Glycopeptidomic-based diagnostics to follow-up disease activity". 2 post-doctoral fellows + € 90.000,00 for materials.

Panel Member of international evaluation committees

EUROPE

ERCEA (ERC Executive Agency)

2012-2019: Panel Member for ERC Advanced Grant evaluation PE5 – Synthetic chemistry and materials, Brussels (attended 4 panels, 2 meetings in Brussels every two years).

ERC-2018-AdG PE5 PANEL EVALUATOR Step 2 (Brussels, BE, 30/01-01/02/2019) and Step 1 (Brussels, BE, 20-22/11/2018).

ERC-2017-AdG PE5 PANEL EVALUATOR Step 1 (Remote, 28-30/11/2017)

ERC-2016-AdG PE5 PANEL EVALUATOR Step 2 (Brussels, BE, 23-25/01/2017) and Step 1 (Brussels, BE, 14-16/11/2016).

ERC-2014-AdG PE5 PANEL EVALUATOR Step 2 (Brussels, BE, 16-18/03/2015) and Step 1 (Brussels, BE, 12-14/01/2015).

REA (European Research Executive Agency)

2021-2023: Evaluator, Briefing & Rapporteur of Individual Fellowships per Marie Curie Sklodowska-Curie Actions, REA HE-MSCA-PF-2023, REA HE-MSCA-PF-2022 (1/10/2022-09/12/2022) and REA HE-MSCA-PF-2021 (18/11/2021-11/02/2022). 2020: H2020-MSCA-IF-2020 (2/10/2020-4/12/2020). 2019: H2020-MSCA-IF-2019 (7/10/2019-6/12/2019), 2018: H2020-MSCA-IF-2018 (25/09/2018-15/11/2018).

May 2024: Panel member for HORIZON-JU-GH-EDCTP3-2024-01-02-Malaria –Evaluator and cross-reader.

March-June 2024: Panel member for HORIZON-WIDERA-2023-TALENTS-01 (ERA Chairs 24) - Evaluators e Rapporteurs.

October 2023-December 2024: Panel member for HORIZON-HLTH-2024-DISEASE-03-14 two stage - 1st Stage, Tackling high-burden for patients, under-researched medical conditions.

November 2023-January 2024: Panel member for HORIZON-WIDERA-2023-ACCESS-02, Expert and Cross-reader.

November 2023-March 2024: Panel member for EISMEA-EIC PATHFINDER CHALLENGES 2023, Rapporteur and cross-reader.

EISMEA (European Innovation Council and SMEs Executive Agency)

03/07/2023: Monitor for the call HORIZON-EIC-2021-TRANSITIONOPEN-01. Project: INCYPRO: A key technology to enable the broad application of proteins in diagnostics and therapeutics, period 1/6/2022 to 31/5/2023.

ESF (European Science Foundation)

Research Foundation Flanders (FWO)

2023: FWO-Research-Project 23-FWO-FRP-0150; 2022: FWO-SBO-E-2021FWO-SBO-ES-2021FWO-SBO-M-2021; 2021:FWO-BRC Brazil 2021FWO-BRC China 2021; 2020: FWO-FRP-20_Med; 2020: FWO-FRP-20_Bio; 2019: FWO-FRP-19_Med; 2019: GE6 Contrats Doctoraux

ERASMUS MUNDUS

2019: Member of the panel to evaluate the Erasmus Mundus joint Master Degree SERP+ (for Qualifications in the European Higher Education Area - FQ-EHEA), a two-year programme in Surface, Electro, Radiation, and Photo-Chemistry with elements of Management, Business, Innovation and Valorisation, Communication and Patent law (Université Paris-Sud, Universidade de Porto, Università degli studi di Genova, Uniwersytet im. Adama Mickiewicza). Poznan (Poland), June 1-3, 2019.

12-14 November 2018: Member of the training committee for the implementation of the European Approach to Quality Assurance of Erasmus Mundus Joint Master Degrees. COLOGNE (Germany).

FRANCE

2021-2024: Member of the Scientific Committee of ChimieParistech, Paris, France

2024: Panel member (representing the French CNU Section 32) of the French High Council for Evaluation of Research and Higher Education (HCERES) for the evaluation committee Group D of the Unit CITCoM - Cibles Thérapeutiques et Conception de Médicaments, UMR 8038, CNRS, Université Paris Cité (January 29-30, 2024), N. Leulliot: Director, I. Broutin: Deputy Director, P. Belmont: Deputy Director.

2020: Panel member (representing the CNU Section 32) of HCERES for the evaluation committee Group A of the Unit "Institut de Biomolécules Max Mousseron", Montpellier, France (February 25-28, 2020).

2019: Nominated member of the Scientific Evaluation Committee N° 44 " Biochemistry of living organisms " for the French "Agence Nationale de la Recherche". ChâteauForm, République, 8 Bis Rue De La Fontaine Au Roi, 75011 Paris (France), January 14-15, 2019 and June 17-18, 2019.

6-7 December 2017: Vice-president of the French High Council for Evaluation of Research and Higher Education (HCERES) evaluation committee Group D of the Unit Molecules of Communication and Adaptation of Microorganisms (MCAM) UMR 7245 CNRS Muséum National d'Histoire Naturelle (MNHN).

2016-2019: Elected member of the "Conseil Nationale des Universités" - CNU (France) to deliberate habilitations and promotions of the French University researchers and professors (4 meetings of 1 week/year).

February 2011: Member of the AERES Committee for evaluation of the ICM of the University of Reims.

2011-2012 Member of the Evaluation Committee of research projects submitted to the "Fondation de la Recherche Médicale", Paris, France.

March 2010: Member of the AERES Committee for the evaluation of iBiTecc-S Equipe SIMOPRO (CEA, Saclay).

CANADA

CANADIAN INSTITUTES OF HEALTH RESEARCH

2022: Panel member of the committee to evaluate projects for Joint Canada-Israel Health Research Program Phase II Funding Opportunities. Individual evaluations of 7 projects (13/05/2022-13/06/2022) with participation at 3 joint committees to define the ranking list of the selected projects (20-22/06/2022, online via zoom).

LITHUANIA

Research Council of Lithuania

April-June 2024: Member of the Expert Panel for the Research Council of Lithuania for the Call for proposals XIII CALL FOR PROPOSALS FOR THE IMPLEMENTATION OF RESEARCHER GROUPS PROJECTS FOR 2024-2027.

2023: Member of the Expert Panel for Comparative Expert Assessment of Research and Development Activities Carried out by Universities and Research Institutes in Lithuania, to evaluate the Unit of Assessments Biochemistry, Chemical Engineering (Biotechnology), and Chemistry of Vilnius University (Individual assessment: 2023-03-16 - 2023-04-19; Expert panel visits in Vilnius: 2023-04-24 - 2023-04-28; Summary assessment period: 2023-04-29 - 2023-05-31)

2022: Expert Panel commission for the Research Council of Lithuania for XII CALL FOR PROPOSALS FOR THE IMPLEMENTATION OF RESEARCHER GROUPS PROJECTS FOR 2023-2026. Evaluation of 30 projects of Natural, Technical, and Medical Sciences.

2021: Leader of the expert Panel commission for the Research Council of Lithuania for the Call for proposals Promotion of Postdoctoral Fellows. Evaluation of 26 projects of Natural, Technical, and Medical Sciences (March 8, 2021-May 13, 2021. 2 Steps, 2nd step on April 20, 2021 held remotely using Microsoft TEAMS platform).

2021: Leader of the expert Panel commission for the Research Council of Lithuania for the Call for proposals for Lithuanian-Polish programme. Evaluation of 30 projects in the field of Natural, Technical, Agricultural, and Medical Sciences (February 3, 2021-March 24, 2021. 2 Steps, 2nd step on February 25, 2021 held remotely using Microsoft TEAMS platform).

2020: Member of the expert commission of the Research Council of Lithuania for the X Call for proposals for the Implementation of researcher groups projects for 2021-2024. Evaluation of 34 projects in the field of Natural, Technical, Agricultural, and Medical Sciences (November 17, 2020-January 30, 2021. 2 Steps, 2nd step on December 17, 2020 held remotely using Microsoft TEAMS platform).

2020: Leader of the expert panel commission for the Research Council of Lithuania for EEA Financial Mechanism 2014-2021, Baltic Research Programme, Call for Proposals in Lithuania, evaluation of 11 projects in the field of Natural, Technical, and Medical Sciences (July 1-9, 2020).

2020: Leader of the expert panel for the Research Council of Lithuania for the Evaluation of "Implementing World-class R&D Projects (SMART)" of 22 projects in the field of Natural, Technical, Medical and Agricultural Sciences (May 7-8, 2020).

2020: Member of the expert panel and acting as Leader of the expert panel for the Research Council of Lithuania for the "Distinguished Professor Programme". Evaluation of 12 projects in the field of Natural, Technical, Medical and Agricultural Sciences (February 1-March 5, 2020).

2019: Member of the expert commission of the Research Council of Lithuania for the Competitive Funding of Research and Dissemination Projects (evaluation of 27 projects). Two-stage evaluation process: 1st stage individual expert assessment of the proposal remotely (by March 17, 2019); 2nd stage participation at the panel assessment followed by the summary evaluation on March 22, 2019, 9:00-18:00, Research Council of Lithuania in Vilnius (Gedimino av.3, Room 212), Lithuania.

24-29 September 2018: Panel member as expert of bioorganic chemistry and chemical biology for assessment of research and development of the universities and research institutions of Lithuania in the field of physical sciences.

ROMANIA

Executive Agency for Higher Education, Research, Development and Innovation Funding (U.E.F.I.S.C.D.I, Bucarest)

2021-2022: Expert reviewer & Rapporteur funding applications for 8 projects: a) Programme 1 - Subprogramme 1.1. Human Resources: i) Postdoctoral Research Projects (PD-2021), ii) Research Projects for Young Independent Teams (TE-2021), and b) Programme 4 Fundamental and Frontier Research Exploratory Research Projects (PCE-2021). Domain 1) PHYSICAL SCIENCES AND ENGINEERING, Subdomains: a) PE4. Physical and Analytical Chemical Sciences: Analytical chemistry, chemical theory, physical chemistry/chemical physics, b) PE5. Synthetic Chemistry and Materials: Materials synthesis, structure-properties relations, functional and advanced materials, molecular architecture, organic chemistry; Domain 2 LS. LIFE SCIENCES, Subdomains: a) LS7. Applied Medical Technologies, Diagnostics, Therapies and Public Health: Development of tools for diagnosis, monitoring and treatment of diseases, pharmacology, clinical medicine, regenerative medicine, epidemiology and public health, b) LS9. Applied Life Sciences, Biotechnology, and Molecular and Biosystems Engineering: Applied plant and animal sciences, forestry, food sciences, applied biotechnology, environmental, and marine biotechnology, applied bioengineering, biomass and biofuels, biohazards).

SPAIN

2024-2027: Nominated member of the Scientific Advisory Board of Instituto de Química Médica (Madrid). 4-5 online meetings (1-2 hours each, between June and October) to discuss research plans, methodologies, and future directions, an in-person visit on September 26th, 2024 concomitantly with the ceremony commemorating IQM's 50th anniversary (October 27th, 2024). October 2024 the participation will consist of one-two meetings per year for a follow up.

2019-2023: Nominated as 1 out of 8 members of the External Scientific Advisory Board of The Institute for Advanced Chemistry of Catalonia (IQAC), belonging to the Spanish National Research Council (CSIC), and devoted to research of excellence in Chemical Sciences, as a leading scientist in peptide chemistry and the application of peptides in different fields (1st Meeting in Barcelona, Catalonia 25-26 November 2019).

POLAND

August-November 2023: Panel member for National Science Centre. Funding Scheme OPUS-NZ7. Three-step procedure: stage 1: remote individual evaluation of projects and online panel meetings (on Webex) 28.08-

30.08.2023 for ranking short list; stage 2: evaluation of external experts and online panel meeting (on Webex)
16.10.2023 for final ranking list and consensus reports for rejected proposals.

January-April 2023: Panel member for National Science Centre. Funding Scheme OPUS (addressed at researchers at any stage of their research career) + LAP (funding for foreign partners and is organized in cooperation with foreign research teams from the Czech Republic, Austria, Slovenia, Germany, Switzerland Luxemburg and Belgium-Flandres). Three-step procedure: stage 1: remote individual evaluation of projects and 27.02-28.02.2023 in person meeting in Krakow (PL) for ranking short list; stage 2: evaluation of external experts and 14.04.2023 on-line meeting on Webex for final ranking list and consensus reports for rejected proposals.

26-27 July 2018: Panel member of the Foundation for Polish Science to select the winners of the First Team programme, edition 5/2018, Warsaw (Poland).

SLOVENIA

June 2016: Evaluation panel member for Promotion of Research and Development Programs Implementation for the Ministry of Education, Science, and Sport, Republic of Slovenia.

Remote Referee of international evaluation committees

2019-2020: Expert member for the European Science Foundation

2017: Expert member for the German-Israeli Foundation (GIF) for Scientific Research and Development to evaluate projects presented at the GIF Regular Program.

2016: External Member of an "Ad Hoc Committee" for promotion review at The Scripps Research Institute (TSRI) of candidates to the rank of Associate Professor with Tenure.

2016: Appointed evaluator for research projects submitted to the United States – Israel Binational Science Foundation (BSF).

2016: Appointed External evaluator of candidates for Faculty Positions in the subject field "Organic Chemistry with emphasis on Chemistry" at the University of Patras (Greece).

2015-2016: Appointed Reviewer for research projects submitted to the executive government agency of the Polish National Science Centre (Narodowe Centrum Nauki - NCN; <http://www.ncn.gov.pl>).

2014: Appointed reviewer for "Vienna Science and Technology Fund (VSTF, Austria)" to evaluate proposals submitted to the Vienna Research Groups for Young Investigators call in the field of "Life Sciences".

2014: Appointed reviewer for the National Science Centre in Poland (Narodowe Centrum Nauki - NCN; <http://www.ncn.gov.pl>) to evaluate projects in the Funding scheme PRELUDIUM.

2011-2013: Appointed reviewer for the "Association Nationale Recherche et Technologie (ANRT, Paris, France) to evaluate proposals "CIFRE" (Conventions Industrielles de Formation par la Recherche) to fund PhD fellowships to be performed 50% in industrial environments.

2012-2017: Referee for the Evaluation of the quality of the research of the Italian Universities (VqR)

2010-2020: Member of the Council of "Ordine dei Chimici della Toscana" (Society of Chemists in Tuscany).

Member of evaluation committees for academic positions in Italy

2021: Member of the evaluation committee for positions of associate professor, Università degli Studi di Parma, Dipartimento di SCIENZE DEGLI ALIMENTI E DEL FARMACO, 03/C Organic chemistry (Decreto Rettorale rep. DRD n. 265/2021 PROT. 34751, 8.2.2021).

2021: Member of the evaluation committee for tenure track positions (art. 24, Comma 3, Lettera B, Legge 240/2010).

Organisation of International Symposia

2024: Elected in 2016 by the General Assembly of the European Peptide Society Co-chairperson of the 14th International Peptide Symposium/37th European Peptide Symposium that will be held in Florence (Italy), 25-31 August 2024 (after two postponed dates scheduled for COVID-19 ([37EPS-14IPS-Florence 2024](#))).

2019: Chairperson of the "Giornata scientifica della Società Italiana Peptidi dedicata ai Soci Giovani, Premio scientifico Vittorio Erspamer. September 21, 2019, Polo Didattico Morgagni, University of Florence, Viale Morgagni 44, Firenze (Italy).

2019: Co-chairperson with Fernando Albericio of the International Oligonucleotides and Peptides Conference, Track Peptides, Ramada Plaza Hotel, Milano (Italy), September 17-18, 2019.

2019: Chairperson Session III: Peptide Nutraceuticals and Cosmeceuticals and Session IV: Peptide Engineering and Smart Materials, CIS 2019 - Chemistry meets Industry and Society, Società Chimica Italiana, WS3 – Smart Peptide Chemistry for next generation industry in a sustainable society, Grand Hotel Salerno, Salerno (Italy), August 28-30, 2019.

2016: Co-chairperson of the 2016 GRC: Chemistry & Biology of Peptides: Crossing Barriers by Peptide Science for Health and Wellness, with Prof. Dr. P. Dawson, Ventura, CA (USA), 21-26/02/2016

2014: Vice-cochair of the GRC: Chemistry & Biology of Peptides: Peptide Science in the Era of Synthetic Biology, Ventura, CA (USA), 23-28/02/2014.

2016: Chairperson of 1st Mass Spectrometry Peptide Day, Convento di Sant'Apollonia, Firenze, 10-12 February 2016 (<http://www.spettrometriadi massa.it/Congressi/1MS-PeptideDay/>)

2014: Co-chairperson of the International Symposium Peptides in Paris PIPS 2014 and Training Course 5-10 October 2014. Co-editor of the special issue in Biopolymers Peptide Science together with S. Lavielle (UPMC, Paris) and W.D. Lubell (Université de Montreal).

2014: Responsible of the thematic semester "Peptides & Proteins Molecules of Life. Université de Cergy Pontoise (France) as final event of the Chaire d'Excellence 2009-2014.

2011: Chair of the Symposium "PEPTIDES AND PROTEINS IN THE NEW MILLENNIUM" organised in honour of the Doctorate Honoris Causa attributed from the Université de Cergy-Pontoise to Prof. Luis Moroder in Neuville-sur-Oise (France), 5-6 October, 2011.

2011: Chair of the Symposium MAOPS2 - Microwave-Assisted Organic Peptide Synthesis, Chiostrro del Maglio, Firenze (Italy), 26-28 April 2011.

2010: 1st Italy-Australia Peptide Symposium on Biomolecules for Diagnostics & Therapeutics, Satellite of 31st European Peptide Symposium, Monash University, Prato (Italy), 10-12 September, 2010.

2007: EUROCOMBI4, 1st International Symposium on Combinatorial Sciences in Biology, Chemistry, Catalyst and Materials, Chiostrro del Maglio, Firenze (Italy), 15-18 July, 2007.

2006: International Training Course on Mass Spectrometry & High Performance Liquid Chromatography of Proteins (sponsored by UNESCO), Polo Scientifico, Università di Firenze, 1-12 May 2006.

2003: 1st Practical Training Course: Innovative Combinatorial Approches and Technologies (sponsored by European Society of Combinatorial Sciences,) Polo Scientifico, Università di Firenze, 9-11 April, 2003.

Member of scientific committees of international symposia

2022: Member of the Scientific Advisory Board of the 12th International Peptide Symposium/36th European Peptide Symposium, Sitges (Spain) August 28-September 2, 2022.

2020: Member of the Scientific Committee of the 3rd Meeting of the Italian Peptide Society, December 12, 2020 (Webinar, Rome, Italy).

2018: Member of the Scientific Committee of the 16th Naples Workshop on Bioactive Peptides, Naples (Italy) June 7-9, 2018.

2017: Appointed member of the Advisory Committee of the American Peptide Symposium 2019, Monterey, CA, USA, June 22-27, 2019.

2017: Appointed member of the Organising Committee of the European Chemistry Conference, Roma (Italy) June 11-13, 2018.

Member of the scientific committee of EPS. 2016: 34th European Peptide Symposium, Leipzig (Germany); 2014: 33rd European Peptide Symposium, Sofia (Bulgaria), 2010: 31st European Peptide Symposium, Copenhagen (Denmark).

2009: Member of the scientific committee of SCS-09 - 2nd International Symposium on Combinatorial Sciences in Biology, Chemistry, Catalysts and Materials, Beijing (China).

2002 and 2004: Member of the scientific committee of 2nd, 3rd, and 5th Medicinal Chemistry Conference: Drug discovery and Design, University of Patras (Greece).

Member of international evaluation and selection committees of PhD and habilitation exams

April 21, 2023: External evaluator and president of the committee of the PhD thesis in Industrial Chemistry and Chemical Engineering (CII), Politecnico di Milano of Mr. Alessandro Marchetti. Title: HALOGENATED AMYLOIDOGENIC PEPTIDES: FROM SELFASSEMBLY TO HYBRID MATERIALS. Politecnico di Milano.

February 2023: External examiner of the PhD thesis in Biochemical Engineering from the School of Biochemical Engineering of the Indian Institute of Technology of the Banaras Hindu University (Varanasi, India) of Mr Deepankar Sharma. Title: L-ASPARAGINASE PRODUCTION FROM MICROBIAL SOURCE, PURIFICATION, CHARACTERIZATION AND APPLICATION.

March 2023: External rapporteur of the PhD thesis in Chemistry Cycle 34 of the Università degli studi di Salerno of Ms. Alicja Araszczuk. Title: MACROCYCLES: NEW PROPERTIES AND APPLICATIONS.

2021: Rapporteur of the PhD Committee of Carole Deflers, July 8, 2021, Title: Evaluation and Optimization of Targeting Systems for the Preferential Heart Delivery of Therapeutic Agents. PhD thesis of the Université Paris-Saclay, École doctorale n°569 : Innovation Thérapeutique : du fondamental à l'appliqué (ITFA).

2021: Member of the PhD Committee of Hendrik Rusche as Supervisor, April 12, 2021, Ecole Doctorale Sciences et Techniques, CY Cergy Paris Université (online via Zoom)

2020: Examineur of the PhD Committee of Bastien Petit, December 2, 2020, Ecole Doctorale de Pharmacie, Université de Bourgogne Franche-Comté (online via Zoom)

2020: Member of the PhD Committee of Antonio Mazzoleni as Supervisor, May 5, 2020, Ecole Doctorale en Chimie, Paris Sorbonne Université (online via Zoom)

August-September 2018 Member of the selection committee of the 34th PhD Course in Chemical Sciences of the University of Florence (Italy).

2010, 2012 & 2013 Referee at Ecole Doctorale en Chimie, Université Pierre et Marie Curie, Paris (France)

2010 : Referee at Ecole Doctorale en Chimie, Université Montpellier 2

2009 : Referee at Ecole Doctorale en Chimie, Université de Bourgogne

2008, 2010 & 2011 : Referee at Ecole Doctorale en Chimie, Université de Strasbourg

2011, 2016 & 2016 : Referee at Ecole Doctorale en Chimie, Université Paris-Sud (France)

2012: Referee at the PhD School in Chemistry of the University of Montreal (Canada).

Referee of "Habitations à diriger les recherches" (HDR)

2008 : University of Strasbourg (France)

2011 : Université Pierre et Marie Curie, Paris (France).

International Teaching Activities as Visiting Professor

2020: Staff Teaching Mobility, Université de Rouen (8h teaching)

2019: Erasmus Teaching Mobility at the University of Wroclaw (Poland) (13h teaching – 1 week)

2018: Erasmus Teaching Mobility at the University of Wroclaw (Poland) (13h teaching – 1 week)

2016: Erasmus Teaching Mobility at the University of Wroclaw (Poland) (10h teaching – 1 week)

2010: Erasmus Teaching Mobility at the University of Bolu (Turkey) (8h teaching – 1 week)

2010: Erasmus Teaching Mobility at the University of Balikesir (Turkey) (8h teaching – 1 week)

2010: Erasmus Teaching Mobility at the University of Patras (Greece) (8h teaching – 1 week)

2010: Erasmus Teaching Mobility at the University of Gdansk (Poland) (8h teaching – 1 week)

2008: Invited Professor at the Université de Cergy-Pontoise (France) (8h teaching – 1 week)

2008: Invited Professor at the Université de Bourgogne, Dijon (France) (1 month)

2005: Invited Professor of Organic Chemistry at the Université de Bourgogne, Dijon (France) (1 month)

1999: Visiting Scientist at the Medizinisch Naturwissenschaftlichen Forschungs Zentrum, University of Tuebingen (Germany) (1 month)

1999: Invited Professor of Organic Chemistry, U.F.R. Sciences et Techniques, Neuville sur Oise, Université de Cergy-Pontoise (France) (1 month)

1998: Invited Professor of Organic Chemistry, U.F.R. Sciences et Techniques, Neuville sur Oise, Université de Cergy-Pontoise (France) (6 months).

ITALY

Teaching activities at the School of Mathematical, Physical, and Natural Sciences, Department of Chemistry, University of Florence (Italy)

Since 2021: 3-year First Cycle Degree in Italian (DM 270/04) in Biological Sciences (B005). Course B006416 – ORGANIC CHEMISTRY (M-Z) (3 ECTS, First year - Second Semester, Scientific Area Organic Chemistry).

Since 2019: Second Cycle Degree in English: ADVANCED MOLECULAR SCIENCES. Course B029593 - ADVANCED SYNTHETIC METHODS (6 ECTS, First year - First Semester, Scientific Area Organic Chemistry).

Since 2010: Second Cycle Degree in CHEMICAL SCIENCES: curriculum in Chemistry of Biological Molecules. Course B012715 - CHEMISTRY OF BIOMOLECULES (6 ECTS, First year - First Semester, Scientific Area Organic Chemistry).

Since 2010: Second Cycle Degree in CHEMICAL SCIENCES: curriculum in Synthesis, structure and properties of organic compounds. Course B012895 - BIOORGANIC CHEMISTRY (6 ECTS, First year - Second Semester, Scientific Area Organic Chemistry).

2002-2007: "Laurea triennale" (B.Sc.) in Chemistry (6 ECTS): Course Laboratory of Organic Chemistry I.

2007-2009: "Laurea Specialistica" (M.Sc.) in Chemistry of Biological Molecules: Course Bioorganic Chemistry & Laboratory of Bioorganic Chemistry (6 ECTS).

Teaching activity at the School of Economics and Management (DISEI), University of Florence (Italy)

Since 2022: 3-year First Cycle Degree (DM 270/04) in English: SUSTAINABLE BUSINESS FOR SOCIETAL CHALLENGES (B247). Course: B031720 - SUSTAINABLE, ENVIRONMENTAL CHEMISTRY AND TECHNOLOGY FOR CIRCULAR ECONOMY (WITH LAB) (4/12 ECTS, First year - Second Semester, Scientific Area Organic Chemistry).

FRANCE

Teaching activities at the UFR Sciences et Techniques, University of Cergy-Pontoise – CY CERGY-PARIS Université (France)

2015-2020: 132h/year. Semester 1, Course Master 1: Bioorganic Chemistry (20h: 10h CM + 10h TD), Course Master 2 Molecules for health: Peptides and Proteins (15h CM) and Immunochemistry (6h CM). Semester 2, Course Master 1 – option biomolecules: Amino acids and peptides (20h: 10h CM + 10h TD); Practical tutorials (Travaux Pratiques) Organic Chemistry (35h). Direction of the platform PeptLab@UCP: 24h.

2009-2014: 60h/year Semester 1: Bioorganic Chemistry (20h: 10h CM + 10h TD); Travaux Pratiques Chimie organique (35h).

Innovative Teaching and Dissemination Activities in Italy

2016-2023: Coordinator with Prof. V. Schettino of the Training course for professors of Sciences Multidisciplinary aspects of teaching Sciences in high schools, Polo Firenze - I Lincei per una nuova didattica nella Scuola, Fondazione "I Lincei per la Scuola", Accademia Nazionale dei Lincei. [Polo Firenze Accademia Lincei](#)

2020: Panel member of the evaluation committee of the finalists of FameLab 2020 (March 7, 2020): "Talent in science" an international competition of young researchers and PhD students involved in scientific dissemination, OpenLab, Psiquadro, and British Council Italy (the first 2 will participate at Masterclass in science communication at the international competition in Cheltenham, UK, June 4-5, 2020).

2010-2012: Director of the "Corso di Specializzazione per la Professione di Chimico", Faculty of Sciences of the University of Florence in cooperation with Ordine dei Chimici della Toscana.

2010 and 2011: Organiser of the Course "Rischio Chimico" for VVFF (Vigili del Fuoco) in the Regione Toscana in cooperation with OpenLab and Ordine dei Chimici della Toscana

2010: Organiser of the Course "Mass Spectrometry" for VVFF (Vigili del Fuoco) in the Regione Toscana in cooperation with OpenLab and Ordine dei Chimici della Toscana.

2002-2003: Member of the Board and teaching activity in the Master 2nd level "Innovative Synthetic Methodologies" of the Faculty of Sciences of the University of Florence.

2002: Member of the Organising Board of the *Open day* of the Department of Chemistry XII Week of Scientific Culture in Tuscany.

Since 2001: Organiser of Chemistry Activities for OpenLab – Dissemination of Science at the "Polo Scientifico e Tecnologico" of the University of Florence for students from 3 to 18 years old of the Schools in Tuscany.

1986-1990: Trainer of Chemistry for Teachers of Primary Schools in the Project IRRSAE in Tuscany.

Scientific contributions

A.M. Papini contributed with 358 peer-reviewed publications (249 articles in scientific journals and 109 articles in books), 11 International Patents. Full paper list is available at www.peptlab.unifi.it and <https://www.unifi.it/p-doc2-0-0-A-3f2a3d2b3b302b.html>

BIBLIOMETRIC PARAMETERS (10/06/2024). ORCID: 0000-0002-2947-7107. Research ID 7005551589. WOS Researcher ID AAZ-5204-2020 - Total publications: 368, citations: 3643, h-index 32. SCOPUS ID 7005551589 - Documents: 203, citations: 3545, h-index 33. GOOGLE SCHOLAR - Citations: 4881. h-index: 38. i10-index 114.

Communication of the scientific activity

2000-2024: invited to present 153 lectures: 124 lectures in International Symposia (keynotes, invited and plenary), Universities and Research Centres (EU, USA, Canada, Australia, Israel, Japan, South Korea, China) and 29 lectures aimed to technology transfer in the global space of R&D. 1997-2023: 73 oral & 280 poster communications were selected in international symposia and presented by her students or co-workers or personally.

Supervisor of diploma/master/bachelor and PhD students

Supervisor of 38 PhD students in Chemical Sciences (32 finalised and 6 ongoing), 83 M.Sc. and 29 B.Sc. in Chemical Sciences. Tutor of Erasmus students: 33 Erasmus Traineeship students for periods from 4 months till 1 year.

Snap-shot of PeptLab group at the University of Florence (as of June 2024)

2 Full Professors, 1 Associate Professor, 1 CNR Researcher, 2 Technologists, 5 Post-docs, 11 PhD students, 5 M.Sc. students, 4 Erasmus traineeship students.

Editorial Advisory Board Member

Since 2005: Editor-for-Europe of Protein & Peptide Letters, Bentham Science Publishers Ltd.

Since 2004: Current Drug Delivery, Bentham Science Publishers Ltd.

Since 2005: International Journal of Peptide Research and Therapeutics.

Since 2009: Member of the Editorial Advisory Board of Journal of Peptide Science, Wiley Publisher.

Since 2013: Member of the Editorial Advisory Board of Current Protein & Peptide Science, Bentham Science Publishers Ltd.

Since 2003: Member of the Editorial Advisory Board of International Journal of Peptide Research and Therapeutics, Springer

Since 2017: Member of the Editorial Board di Biosensors – Open Access Journal MDPI (ISSN 2079-6374; CODEN: BIOSHU

Since 2018: Review Editor of Frontiers in Chemistry – Chemical Biology Open access publisher

Since 2018: Associate Editor of Current Peptide and Protein Sciences, Bentham Science Publishers Ltd.

2007-2016: Member of the Editorial Board of Chemistry Today, Editor Teknoscienza

Member of the board of scientific societies

2019-2025: Elected Councilor of the American Peptide Society.

2011-2020: Elected Treasurer and member of the Executive Board of the European Peptide Society. She contributed to an increase of funding from 97.000,00 Euro to 250.000,00 Euro thanks to new agreements established with Wiley, BCN, Curran Associates.

2017-2021: Elected Member of the Executive Board of the Italian Peptide Society and acting as scientific officer.

2004-2008: Appointed Member of the Scientific Affairs Committee of the European Peptide Society.

2000-2013: Appointed academic representative for Italy in the Board of the Society of Combinatorial Chemistry.

Scientific Societies Membership

Since 1988: Charter Member of the American Peptide Society.

Since 1988: Member of the European Peptide Society and of the Federation of American Societies for Experimental Biology.

Since 2000: Member of the Society of Combinatorial Sciences.

Since 2016: Founder and member of the Italian Peptide Society

Scientific fields of interest

Peptide and protein organic chemistry. Development of synthetic solid-phase strategies. Microwave-assisted peptide synthesis. Bioorganic chemistry of peptides and proteins. Synthetic & semi-synthetic strategies of co- or post-translationally modified proteins. Unnatural amino acids orthogonally protected for peptide synthesis (constrained amino acids, glycosyl and lipophilic amino acids). Coupling reagents for peptide chemistry (amide and ester bond formation). Side-chain to side-chain peptide cyclisation, i.e., lactams, dicarba analogs, triazolyl-based cyclization, Glaser cyclization, etc., to mimic bioactive secondary structures for SAR studies (PTH, MT, Octreotide, Oxytocin, etc.)

Chemical immunology. Characterization of aberrant post-translational modifications (glycosylation, glycation, lipoylation, etc.) in antigens triggering immune-mediated diseases (Multiple Sclerosis, T1D, PBC, coeliac disease, rheumatoid arthritis, Rett Syndrome, Metabolic disorders, etc.) to characterize antibodies. Characterization of anti-drug antibodies. Study of the molecular mechanisms of immune-mediated diseases. Cross-reactions with infectious diseases, i.e., bacterial and/or viral infections.

Industrial applications

In vitro Diagnostics and peptide biomarkers. Glycoconjugates and PTM antigens as diagnostic and prognostic tools for human, animal, and plant diseases. IVDs for autoimmune diseases. Characterisation of biomarkers of disease activity. R&D of diagnostic/prognostic tools, immunotherapies, apheresis technologies. **In vivo Diagnostics and imaging techniques.** DOTA peptide analogues for cancer pre-targeting diagnosis & therapy. FIV peptides for the development of an anti-retroviral therapy for felines. **Cultural heritage.** Peptide-based immunoassays for characterization of glues, in particular collagen. **Peptide Nutraceuticals and cosmeceuticals.** Spiruline. Fish feed. Peptides involved in collagen turnover. **Development of processes for large-scale green solid-phase peptide synthesis.** Production of active pharmaceutical peptide ingredients by MW-technology.

Anna Maria Papini was born in Firenze (Italy) on February 2, 1959. Married with 2 daughters Giulia (born in 1991) and Elena (born in 1996). French and Italian nationality. Bilingual: French and Italian mother tongues. Language skills: English and German.



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