

PERSONAL INFORMATION



Giuseppina Sabatino

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Sex : Female

Date of birth: 17/01/1973

Nationality Italian

WORK EXPERIENCE

2017- to present

2015 - 2017

2011 - 2013

2009 - 2015

2001 - 2009

1999 - 2001

1997

Researcher at CNR-IC, Catania

- Post-doctoral Research Fellow at the University of Florence. Project: Design and synthesis of peptides for immunological studies.
- Post-doctoral Research Fellow at the University of Florence. Project: Chemical characterization of proteinaceous pictorial material by UPLC-AccQTag and proteomic techniques.
- Term-contract worker at Espikem S.r.l for the following project: Design, synthesis and commercialization of peptides and their analogues of pharmaceutical interest, biomedical and cosmeceutical.
- Research Fellow at the University of Florence. Project: Synthesis of modified peptides in the context of plasma filtration and immunoabsorption.
- Scholarship at the division of Nuclear Medicine Department of Istituto Europeo di Oncologia (Milano) on the research project: synthesis of new biotin derivatives containing azamacrocyclic chelating agents.
- Term-contract working student at University of Florence for the assistance and information on the use of laboratory equipment.

EDUCATION AND TRAINING

2017

2005

1998

1998

- Qualification a Maître de conférences, Campagne 2017 section 32-Chimie organique, minérale, industrielle, N°de qualification 17232198587 (Francia)
- Ph.D. in Chemistry (University of Florence)
- Qualification to the profession of Chemist (University of Florence).
- Master degree in Chemistry (University of Florence)

PERSONAL SKILLS

Mother language (s)

Italian

Other language(s)

English, French

Memberships

Italian Peptide Society (ItPS)

Tutorship

Co-Supervisor of 24 students from Master and Bachelor degrees in Biotechnology, Chemical Sciences, Pharmaceutical sciences. Supervisor of Erasmus students (Poland, France and Denmark) Tutor of students for the combined school-work program.

Teaching activities

- 2012 Tutor at the Laboratory of Chemistry for students of the Biological Sciences degree course.
- 2011-2012 Course of analytical techniques in the Specialization course for the profession of chemist at University of Florence.
- 2004-2007 Term-contract worker at University of Florence for OpenLab. science education and dissemination services.
- 2009-2015 Espikem srl
- 2013-2015 Fresenius Kabi
- 2017-2020 F.I.S. fabbrica Italiana Sintetici

Technology transfer activities

Conferences

Posters (>50) and oral communications (5) in national and international meetings and schools

Organizing Committee

- Congress 1st MS Peptide Day. Firenze, 10-12 February, 2016
- International Congress Microwave-Assisted Organic and Peptide Synthesis Symposium, Firenze, 27-29 April, 2011. (Italy)
- Congress 1st Italy-Australia Peptide Symposium on Biomolecules for Diagnostics & Therapeutics, Prato, 10-12 September, 2010. (Italy)
- EUROCOMBI 4, first International Symposium on Combinatorial Science in Biology, Chemistry, Catalysts and materials, Firenze, 15-18 July 2007. (Italy)
- International training course on Mass Spectrometry and High Performance Liquid Chromatography of Proteins, Firenze, 1-12 May, 2006. (Italy).

Digital skills

Trained user of most common writing and elaborating computer software. Databases (Beilstein, SciFinder, ISI Web of Knowledge, Chemical Abstract, Medline, Pubmed, Scirus, Scopus); Windows, Package Microsoft Office. Grafica (CorelDraw, Power Point, Chem Draw, Paint shop). Web browser. Chromatography Software: MassLynx, Empower, Chromeleon, Xcalibur.

Other skills Synthesis of peptides in solution and in solid phase, by manual, semi-automatic and automatic instrumentations, conventional and microwave-mediated, by a continuous flow or batch technology. Scale-up of GMP grade peptides as drugs. Chromatographic techniques (HPLC, UHPLC, SPE, Flash, GC) coupled with different detectors such as MS and UV, for the characterization and purification of biomolecules on small and large scale.

ADDITIONAL INFORMATION

Relevant Projects

2022-2025 PNRR ECOSISTEMI PER L'INNOVAZIONE "Sicilian MicronanoTech Research And Innovation Center-SAMOTHRACE". <https://samothrace.eu>.
2023-2025 progetto bilaterale CNR/HAS (Ungheria): "Novel A β /Prion chimera peptides: studies on the inhibition of the A β fibrillogenesis and the role of transition metal ions".
2011-2014 PAR FAS REGIONE TOSCANA - Linea di Azione 1.1.a.3, SICAMOR - Sviluppo di Indagini Chimiche Applicate al Mantenimento delle Opere e al Restauro
2012-2014 Scientific director for Espikem Srl (Leader) POR CREO FESR 2007-2013 attività 1.1 – linea di intervento 1.1.C Bando Regione Toscana 2009 per il sostegno a progetti di ricerca industriale e sperimentale congiunti tra piccole e medie imprese e organismi di ricerca in materia di salute. Titolo: Sviluppo di nuovi peptidi biologicamente attivi
2010-2012 PRIN 2008 Progettazione, sintesi e caratterizzazione immunologica di peptidi modificati per la diagnosi ed il "follow-up" di malattie autoimmuni.
2007-2009 PRIN 2006, Progetto: Immunità umorale nella sclerosi multipla: attivazione dei linfociti B e demielinizzazione.
2006-2008 PRIN 2005 Progetto: Progettazione, sintesi e caratterizzazione immunologica di nuovi glicopeptidi mimetici di autoantigeni mielinici per lo studio dei meccanismi molecolari della sclerosi multipla e per lo sviluppo di strumenti diagnostici innovativi;
2003-2005 PRIN 2003 Progetto: Trasferimento di Carica in Sistemi Biomimetici Controllato da Peptidi;
2002-2005 PRIN 2002 Progetto: Sviluppo e validazione di nuovi approcci terapeutici immuno-mediati per malattie demielinizzanti autoimmuni del sistema nervoso centrale; rilevanza per la sclerosi multipla.

Publications

Relevant publications (Max 10)

- 35 articles, 4 reviews, 26 meeting abstract, 24 proceedings paper
- Zimbone et al. A β 8-20 Fragment as an Anti-Fibrillogenic and Neuroprotective Agent: Advancing toward Efficient Alzheimer's Disease Treatment. *ACS Chemical Neuroscience*. 2023, 14(6), 1126.
- Di Natale et al A β and Tau Interact with Metal Ions, Lipid Membranes and Peptide-Based Amyloid Inhibitors: Are These Common Features Relevant in Alzheimer's Disease? *Molecules*, 2022, 27(16), 5066.
- D'Ercole et al. An Optimized Safe Process from Bench to Pilot cGMP Production of API Eptifibatide Using a Multigram-Scale Microwave-Assisted Solid-Phase Peptide Synthesizer. *Organic Process Research & Development* 2021, 25 (12), 2754–2771.
- Sabatino et al. Fully Automated Solid-Phase Microwave-Assisted cGMP-Ready Process for the Preparation of Eptifibatide. *Organic Process Research & Development* 2021 25 (3), 552-563.
- D'Ercole et al. On resin microwave assisted copper catalyzed azide - alkyne cycloaddition of H1 - relaxin B single chain 'stapled' analogues. *Peptide Science* Peptide science. 2020, Vol.112(4).
- Di Pisa et al. Synthetic Peptides Reproducing Tissue Transglutaminase-Gliadin Complex Neopeptides as Probes for Antibody Detection in Celiac Disease Patients' Sera *J. Med. Chem.* (2015), 58(3), 1390-1399.
- Sabatino et al. Advances in automatic, manual and microwave-assisted solid-phase peptide synthesis. *Current Opinion in drug discovery & Development* , (2008), 11, (6) , 762-770.
- Kaminski et al. N-triazinylammonium tetrafluoroborates. A new generation of efficient coupling reagents useful for peptide synthesis. *J. Am. Chem. Soc.* (2005) 127, 16912-16920.
- Lolli et al. An N-glucosylated peptide detecting disease-specific autoantibodies, biomarkers of Multiple Sclerosis. *Proc. Natl. Acad. Sci., U.S.A.* (2005) 102(29), 10273-10278.
- Sabatino et al. A New Biotin Derivative-DOTA Conjugate as a Candidate for Pre-targeted Diagnosis and Therapy of Tumors. *J. Med. Chem.* (2003), 46, 3170-3173

Patents

- "Process for the preparation of N-triazinylammonium salts". Filing date 07/11/2005. Applicant: Italvelluti S.p.a. Inventors: Z. Kaminski, A.M. Papini, B. Kolesinska, J. Kolesinska, K. Jastrzabek, G. Sabatino, R. Bianchini. PCT/EP2005/055793 (2005).
- J. Hayek, C. De Felice, A.M. Papini, P. Rovero, F. Nuti, F. Real-Fernandez, G. Sabatino, C. Tiberi (2012). Nuovi peptidi glicosilati. -, Azienda Ospedaliera Universitaria Senese; A.M. Papini, P. Rovero, F. Nuti, F. Real-Fernandez, G. Sabatino, C. Tiberi WO2013/182984 A2

Researcher ID

L-7802-2015

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Scopus ID

7006223505

citations

WOS 903; Scopus 829; Google scholar 1143

h-index

WOS 13; Scopus 12; Google scholar 14;

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