



CURRICULUM VITAE



PERSONAL INFORMATION

First name Surname	FRANCESCA NUTI
Address	VIA GIUSEPPE MARCHINI, 28 PRATO
Mobile	3471043281
E-mail	francesca.nuti@unifi.it, francesca.nuti@pec.chimici.it
Citizenship	Italian
Date of birth	18 APRIL 1975

EDUCATION AND TRAINING

- Date **(2016-2020)**
- Title of qualification ***Maître de conférences.***
French CNU (Conseil National des Universités)
Qualification Maître de conférences de la campagne 2017. Section 32
- Chimie organique, minérale, industrielle.
N de qualification 17232198293
- Date **24/01/2005, Cycle XVII**
- Title **Ph.D**
Department of Organic Chemistry "Ugo Schiff", University of Florence.
Title: "Lipophilic and glycosyl amino acids protected for solid-phase synthesis of post-translationally modified peptides of myelin proteins".
Tutor: Prof. Alberto Brandi.
- Date **November 2001**
- Title of qualification Enabled to practice the profession of Chemist. State Exam
- Date **24/04/2001**
- Title of qualification **Master Degree**
Department of Organic Chemistry "Ugo Schiff", University of Florence.
Title: "Stereoselective synthesis of lipophilic amino acids orthogonally protected for solid phase peptide synthesis following Fmoc/tBu strategy". Tutors: Prof. M. Ginanneschi, Prof. P. Frediani.
- Name of organisation

RESEARCH ACTIVITIES

- Date **1 October 2020 –**
- Position **Technologist**
- Research institute Interdepartmental Research Unit of Peptide & Protein Chemistry & Biology (PeptLab), Department of Chemistry “Ugo Schiff”, University of Florence
- Main activity *Mother and Infant dyads: Lowering the impact of endocrine disrupting Chemical in milk for a Healthy life” – MILCH – LIFE18 ENV/IT/000460*

- Date **1 December 2019 – 30 September 2020**
- Position **Post-Doc**
- Research institute PeptLab - (MoD&LS), Centre of Competences in Molecular Diagnostics & Life Sciences, Department of Chemistry “Ugo Schiff”, University of Florence.
- Main activity *Design and synthesis of peptides as biomarkers.*

- Date **1 June 2018 – 30 November 2019**
- Position **Post-Doc**
- Research institute Laboratory PEPTFARM (joining PeptLab and FIS – Fabbrica Italiana Sintetici Spa, Vicenza working in MoD&LS) Department of Chemistry “Ugo Schiff”, University of Florence
- Main activity *Optimization of peptide synthesis as active pharmaceutical ingredients.*

- Date **1 June 2011 – 31 May 2018**
- Position **Assegnista di Ricerca**
(nuovo ordinamento ai sensi dell’art.22 della legge 30 December 2010 N.240, Prot. N. 115881 del 13/07/18 Pos III/13)
(Interdizione anticipata dal lavoro per maternità obbligatoria a rischio per motivi di salute 14 March 2016 - 23 December 2016; Main activity sospesa per congedo parentale dal 25 May 2017 fino al 23 August 2017 compreso)
- Research institute Department of Chemistry “Ugo Schiff”, University of Florence
- Main activity *Research of new biomarkers for diagnosis of the pathologies mediates of immune system.*

- Date **1 March 2010 – 31 May 2011**
- Position **Borsista Post-Doc**
- Research institute Department of Chemistry “Ugo Schiff”, University of Florence
- Main activity *Synthesis and characterization immunochemistry of peptides to develop of biomarkers in autoimmune diseases.*

- Date **1 March 2007 – 28 February 2010**
- Position **Assegnista di Ricerca**
(vecchio ordinamento, ai sensi dell’art. 51, comma 6, Legge 27 December 1997, n.449; D.M. 11 February 1998, Prot. N. 115881 del 13/07/18 Pos III/13)
- Research institute Department of Organic Chemistry “Ugo Schiff”, University of Florence
- Main activity *Glycopeptides and peptides modified to study molecular mechanism of the Multiple Sclerosis. [Best Poster Award of the XVIII International Symposium on Glycoconjugates] Anno 2007- Assegno Premiante, D.R. n. 1019 of 30/10/2006 for the peptides research focusing on multiple sclerosis, (topics of life sciences).*

- Date **1 March 2002 – 28 February 2007**
- Position **Assegnista di Ricerca**
(vecchio ordinamento, ai sensi dell'art. 51, comma 6, Legge 27 December 1997, n.449; D.M. 11 February 1998, Prot. N. 115881 del 13/07/18 Pos III/13)
- Research institute Department of Organic Chemistry "Ugo Schiff", University of Florence
- Main activity *Synthesis of modified amino acids to obtain for a Plasma filtration and Immunoadsorbtion project.*

- Date **2 May 2001 – 31 December 2001**
- Position **Collaborazione Coordinata e Continuativa**
- Research institute Department of Organic Chemistry "Ugo Schiff", University of Florence in collaboration with Department of "Occupational and Social Medicine" Tübingen University (Germany)
- Main activity *Measurement of the amounts of di-(2ethylhexyl)phthalate (DEHP) and dibutylphthalate (DBP) and their metabolites in serum and urine of humans.*

TEACHING AND ASSOCIATED ACTIVITIES

Nominata cultore della materia CHIM06, at the University of Florence

Assistant of the Course of University of Florence

- Date **12 October 2012 – 14 June 2013**
- Position held **Tutor of student** Laboratory of Chemistry
- Istituto Laurea in Biological Science, University of Florence (Prof. A. Bencini).

- Date **1 December 2007 – 31 March 2008**
- Position held **Tutor of student** Laboratory of Chemistry. (38h).
- Istituto Department of Chemistry “Ugo Schiff”, University of Florence (Prof. A. Papini).

- Date **21 May 2007-30 September 2007**
- Position held **Training and refresher course on the teaching of Chemistry for high school teachers. (8 lessons)**
“La Chimica in Cucina” “Le Frontiere della Chimica”
- Research institute University of Florence

- date **2012/2020**
- Course Chimica delle biomolecole
- Degree Corso di laurea in Scienze Chimiche B088

- date **2009/2020**
- Course Chimica Bioorganica
- Degree Corso di laurea in Scienze Chimiche

- date **2009/2020**
- Course Chimica delle biomolecole
- Degree Corso di laurea in Chimica

- date **2008-2011**
- Course Chimica Bioorganica e Laboratorio di Chimica Bioorganica
- Degree Corso di laurea Specialistica in chimica delle Molecole Biologiche

- date **2017-2018**
- Course Biotrasformazioni in chimica organica
- Degree Corso di Master Degree in Scienze Chimiche

- date **2008/2009**
- Course Laboratorio di Chimica Organica
- Degree Corso di Laurea in Chimica Applicata

- date **2008-2011**
- Course Chimica Bioorganica e Laboratorio di Chimica Bioorganica
- Degree Corso di laurea Specialistica inVchimica delle Molecole Biologiche

- date **2002-2003, 2005-2006, 2008-2009**
- Course Laboratory of Organic Chemistry I course,
- Degree Laurea in Chemistry, University of Florence.

Co-Supervision of undergraduate and graduate students

- date **Aa 2023 – 2024**
- Title Synthesis, purification, and characterization of α -Synuclein segments and mutants
- Degree Master Degree in Chemistry (LM-54), University of Florence
- Candidata Quattrociochi Vanessa

- date **Aa 2021 – 2022**
- Title Synthetic glucosylated peptide antigens of Myelin Oligodendrocyte Glycoprotein and of the bacterial protein adhesin of non-typeable *Haemophilus influenzae* to detect antibodies in Multiple Sclerosis and its animal model Experimental Autoimmune Encephalomyelitis
- Degree Master Degree in Advanced Molecular Sciences, University of Florence
- Candidata Hermon Berhane Tesfay

- date **Aa 2021 – 2022**
- Title Synthesis of tripeptides and evaluation of tyrosinase inhibitory activity for cosmeceutical applications
- Degree Bachelor thesis in Chemistry (L-27), University of Florence
- Candidata Monaci Ursula

- date **Aa 2020 – 2021**
- Title Epitopi peptidici della mielina cross-reattivi con anticorpi anti-adesina iperglicosilata di *Non-Typeable Haemophilus influenzae* nella Sclerosi Multipla
- Degree Master Degree in Chemistry (LM-54), University of Florence
- Candidata Michael Quagliata

- Degree **Aa 2019 – 2020**
- Title Mimetismo molecolare nella Sclerosi Multipla: ricerca di anticorpi anti-HMW1(Glc) cross-reattivi verso epitopi espressi sulla guaina mielinica
- Corso di Laurea Master Degree in Medical and Pharmaceutical Biotechnology (LM/9), University of Florence
- Student Alice Manfredini

- date **Aa 2019 – 2020**
- Title Sintesi di resine ChemMatrix® Rink variamente funzionalizzate con fenilboronato per catturare peptidi glicati nel diabete
- Degree Bachelor thesis in Chemistry (L-27), University of Florence
- Student Margherita Marino

- date **Aa 2019 – 2020**
- Title Infezioni batteriche, glicosilazioni aberranti, autoimmunità
- Degree Bachelor thesis in Chemistry (L-27), University of Florence
- Student Angela Sofia Tino

- date **Aa 2018 – 2019**
- Title Ottimizzazione del processo produttivo di un peptide di interesse cosmeceutico derivato dalla Serpina A1
- Corso di Laurea Bachelor thesis in Biotechnology (L/2), University of Florence
- Student Martina Masselli

- date **Aa 2018 – 2019**

- Title Analoghi costretti tramite reazione di click chemistry di peptidi all'ossitocina
- Degree Bachelor thesis in Chemistry (L-27), University of Florence
- Student Lorenzo Macchia

- date **Aa 2013 – 2014**
- Title Approccio bioinformatico per la ricerca di putativi epitopi di N-Glicosilazione aberrante di proteine della mielina umana
- Degree Master Degree in Chemistry, University of Florence
- Student Erica Landi

- date **Aa 2010 – 2013**
- Title Sugar and Peptide mimics for SPR characterization of autoantibodies in monoclonal gammopathy
- Degree PhD thesis cotutel Université de Cergy-Pontoise and University of Florence
- Student Yihong Cao
- Role **Thesis Examiner**

- date **Aa 2009 – 2010**
- Title Sintesi di analoghi C-fosfonati della capsula polisaccaridica del *Neisseria meningitidis A* per lo sviluppo di vaccini glicoconiugati contro

- Degree la meningite
Degree in Specialistica in Chemistry of Biological Molecules,
University of Florence
- Student Jessica Acciai
- date **Aa 2007 - 2008**
- Title Sintesi di amino acidi glicosilati responsabili della risposta anticorpale nei pazienti affetti da neuropatie del sistema nervoso periferico
- Degree Laurea Specialistica in Chemistry of Biological Molecules, University of Florence
- Student Alessandro Vadi
- date **Aa 2007 - 2008**
- Title Sintesi di Building Block esteri glicosidici dell'acido aspartico protetti per la sintesi di peptidi su fase solida
- Degree Bachelor thesis in Chemistry, University of Florence
- Student Mazzanti Virginia
- date **Aa 2007 - 2008**
- Title *N*-Glucosilazione via Cys-ligation sull'antigene sintetico CSF114 per il riconoscimento di autoanticorpi nella Sclerosi Multipla
- Degree Master Degree in Chemistry of Biological Molecules University of Florence
- Student Lorenzo Caciolli
- date **Aa 2007 - 2008**
- Title Sintesi di metaboliti del DEHP per il monitoraggio in fluidi biologici e studi di attivazione del CYP3A4
- Degree Master Degree in Chemistry of Biological Molecules University of Florence
- Student Chiara Testa

From 2002- I supervised and assisted during their periods at the University of Florence: 7 International PhD in cotutel; 7 Master degrees in Chemistry; 5 Pharmaceutical Science; 1 Master degree in Food Science and Technology School of Agriculture; 4 Bachelor degree in Chemistry; Erasmus internship student at PeptLab.

PARTICIPATION IN PROJECTS

- **European Project Life ref. LIFE18 ENV/IT/000460 (2019-2026)**
 - Project Mother and Infant dyads: Lowering the impact of endocrine disrupting Chemical in milk for a Healthy life” – Acronym: life MILCH
 - Coordinator Coordinator Project: Prof P. Palanza, University of Parma
Unit Coordinator Prof AM. Papini, University of Florence

- Project **POR CReO FESR 2007-2013**
 - Bando Regionale 2009 per il Sostegno a Progetti di ricerca industriale e sviluppo sperimentale congiunti tra piccole e medie imprese e organismi di ricerca in materia di salute: Project MARK (Identificazione di biomarker diagnostici per malattie autoimmuni).
 - Coordinator (RU Prof AM. Papini).

- Project **Ente Cassa di Risparmio di Firenze, 2012**
 - Project: Sviluppo di biomarcatori delle malattie dello spettro autistico per il follow-up e la messa a punto di terapie anti-neurodegenerative.
 - Coordinator (RU Prof AM. Papini).

- **Project con Bracco Fondation, 2011**
 - Project Caratterizzazione di metaboliti FTALOX nelle urine e studio di correlazione con disordini nella fase di sviluppo del bambino.
 - Collaboration Dr. E Grossi Dip.Farma Italia Bracco S.p.A, Prof M.Street, Univ di Parma
 - Coordinator (RU Prof AM. Papini).

- Project **Ente Cassa di Risparmio di Firenze, 2009**
 - Project: Produzione di antigeni peptidici e proteici per la diagnosi e la terapia dell'autoimmunità, con particolare riferimento alle malattie orfane.
 - Coordinator (RU Prof AM. Papini).

- Project **Ente Cassa di Risparmio di Firenze, 2008**
 - Project: Studio dell'interazione peptidi-proteine.
 - Coordinator (RU Prof AM. Papini).

- Project **PRIN 2008**
 - Progettazione, sintesi e caratterizzazione immunologica di peptidi modificati per la diagnosi ed il "follow-up" di malattie autoimmuni. Finanziato da MIUR, Italy
 - Coordinator (RU Prof AM. Papini).

- Project **Project Galileo 2006/2007: Programme Action Intégrées PAI Galilée N°11686QA**
 - Collaboration Title: Métallopeptides électrodéetectables appliqués au diagnostic et à la thérapie des pathologies autoimmunes.
 - Collaboration Université Franco-Italienne University of Florence (PeptLab) & Université de Dijon (CNRS, UMR 5188).
 - Coordinator (PI: Prof AM Papini).

- Project **PRIN 2006**
 - Project Antigeni e funzioni effettrici delle cellule B nella sclerosi multipla: autoanticorpi e citochine. Finanziato da MIUR, Italy.
 - Coordinator (RU Prof. F. Lolli).

FIRB 2005 – Internazionalizzazione:

- Project Study of the role of sugars in the etiology of multiple sclerosis.
Coordinator (RU: Prof AM. Papini)
- PRIN 2005:**
Project 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.
Coordinator (RU: Prof AM. Papini)
- Project di ricerca scientifica d'Ateneo (ex quota 60%) anno 2015-2018; 2011-2014**
Project Molecole d'interesse biologico. Sintesi e proprietà.
Coordinator (RU: Prof AM. Papini)
- Project di ricerca scientifica d'Ateneo (ex quota 60%) anni 2006-2010; 2005-2008**
Project Molecole d'interesse biologico. Sintesi e proprietà.
Coordinator (RU: Prof. Ginanneschi M.)
- Ministero Università PRIN 2003/04**
Project Approccio Combinatorio per lo Sviluppo di Peptidomimetici come Ligandi Specifici di Anticorpi in Malattie Autoimmuni.
Coordinator (RU: Prof. A. Brandi)
- Fondation Lieselotte und Dr. Karl Otto Winkler (Germania) 2001**
Project Measurement of the amounts of di-(2-ethylhexyl)phthalat (DEHP) and dibutylphthalat (DBP) and their metabolites in serum and urine of humans
Collaborazione Department of "Occupational and Social Medicine" Tübingen University (Germany)
Coordinator (RU: Prof. AM. Papini)

Patent

- Date **2012**
- Novel Glycosylated Peptides. PCT Application WO2013182984 (A2). (2012) *Inventors*: J. Hayek, C. De Felice, A.M. Papini, P. Rovero, **F. Nuti**, F. Real-Fernandez, G.Sabatino, C. Tiberi. [38]

AWARDS

- Date **2005**
- Best Poster Award [F. Nuti, et al. Sugar-scan of CSF114(Glc) for autoantibody recognition in Multiple Sclerosis. XVIII International Symposium on Glycoconjugates. Glyco XVIII", Florence, September 4-9, 2005, Abstract P057, Glycoconjugate J., 2005, 22(4-6), 254]. Da elenco P6
- Date **2006**
- Best Poster Award Lucio Senatore [V. Volkov, F. Nuti, et al. 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] .da elenco P12
- Date **2007**
- Assegno premiante Assegno Premiante Title: "*Glicopeptidi e peptidi variamente modificati per lo studio dei meccanismi molecolari della sclerosi multipla*" assegnato al Dip. di Chimica Organica con D.R. n. 1019 del 30/10/2006 per lo sviluppo delle ricerche sui peptidi con particolare

riguardo alla sclerosi multipla, anche in relazione all'interesse strategico delle Main activity chimica sulle tematiche di scienze della vita. [Vedi allegato 2]

- Date **2015**
- Best Oral Young Investigator Oral. Rentier, C.; Pacini, G.; Carotenuto, A.; **Nuti, F.**; Selmi, C.; Battezzati, P.M.; Rovero, P.; Papini, A.M. *Peptides of the dihydrolipoyl acetyltransferase for the detection of autoantibodies in primary biliary cirrhosis*. 52nd Japanese Peptide Symposium, Hiratsuka Japan, November 16-18, 2015 Abstract Y-13. [Da allegato 1 **OC17**]

Editorial Advisory Board Member

- Date **2007 -**
- Assistant of Editor-for-Europe of Protein & Peptide Letters and of Current Protein & Peptide, Bentham Science Publishers Ltd. ([http://www.https://bentham.manuscriptpoint.com](http://www.bentham.manuscriptpoint.com)).

ORGANISATIONAL SKILLS AND COMPETENCES - (member of organizing committee)

- Date **2024**
- Congress 37thEPS European Peptide Symposium- Firenze, 25 - 29 August 2024

- Date **2017**
- Congress Emerging peptide science from Italy. Giornata Scientifica dedicata ai Soci Giovani - Firenze, 23 September 2017

- Date **2016**
- Congress 1st MS Peptide Day. Firenze, 10-12 February, 2016

- Date **2014**
- Congress Peptides in Paris Symposium (PIPS) - October 5-8, 2014 & 1st Peptide & Protein Chemistry & Biology Training Workshop for Postdoctoral fellows & PhD students - October 8-10, 2014, Cergy Pontoise, (Francia).

- Date **2011**
- Congress International Microwave-Assisted Organic and Peptide Synthesis Symposium, Firenze, 27-29 April, 2011. (Italy)

- Date **2010**
- Congress 1stItaly-Australia Peptide Symposium on Biomolecules for Diagnostics & Therapeutics, Prato, 10-12 September, 2010. (Italy)

- Date **2007**
- Congress Eurocombi4, Symposium, the first International Symposium on Combinatorial Sciences in Biology, Chemistry, Catalysts and Materials, Firenze, 15-18 July, 2007. (Italy)

- Date **2006**
- Congress International training course on Mass Spectrometry and High Performance Liquid Chromatography of Proteins, Firenze, 1-12 May, 2006. (Italy)

SCIENTIFIC SOCIETIES MEMBERSHIP

- Date **2002**
Member of the Italian Chemical Society (divisione Chimica dei Sistemi Biologici e divisione di Chimica Organica, SCI)

- Date **2002**
Member of European Peptide Society (EPS)

• Date

2007

- Congress Member of APS "American Peptide Society" (APS)
- Date **2016 ad oggi**
- Congress Member of the *Società Italiana Peptidi (ItPS)*

COURSES ATTENDANCE: CONGRESS AND WORKSHOPS

Oral presentations:

- Date **2007**
- Congress Multiple Sclerosis Lab Retreat, Fattoria Pieve a Salti (Buonconvento, SI), 26-27 January 2007. (Italy)
- Date **2002**
- Congress European Commission-funded Intensive Course: Synthesis for Solving Biological Problems, Newcastle upon Tyne (England), August, 3-10, 2002.

Participation to congress:

- Date **2020**
- Congress III Convegno della Società Italiana Peptidi- *Firenze, 12 December 2020* (Italy) In Modalità Telematica
- Date **2019**
- Congress 50 anni in MS-Tandem: dove siamo arrivati e dove andiamo?, Firenze December 12. (Italy)
- Date **2017**
- Congress 50 anni in MS-Tandem: dove siamo arrivati e dove andiamo?, Firenze December 12. (Italy)
- Date **2015**
- Congress The 4th Italy - Israel Meeting Autoimmunity and Autoinflammation: Cutting Edge Siena, September 27 -28 2015. (Italy)
- Date **2014**
- Congress Course di formazione particolare aggiuntiva in materia di sicurezza e salute sul lavoro per preposti. (8h). Responsabile: Arch.L. Martini.
- Date **2012**
- Congress 32th European Peptide Symposium, Atene (Grecia), September 2-7, 2012
- Date **2010**
- Congress Probes for peptide science: design and methodological development, Paris (France) April 8-9, 2010
31st European Peptide Symposium, Copehagen (Denmark), September 4-9 2010
1st Italy-Australia Peptide Symposium on Biomolecules for Diagnostics & Therapeutics, Prato, September 10-12, 2010.
XII Convegno-Scuola sulla chimica dei carboidrati, Certosa di Pontignano (SI), 20-23 June 2010.
- Date **2009**
- Congress 11th International Congress on Amino Acids, Peptides and Proteins, Vienna (Austria) 3-7 August 2009
- Date **2008**
- Congress 30th European Peptide Symposium, Helsinki (Finlandia), August 31-September 6, 2008.

- Date **2007**
- Congressi Benzon Symposium no. 54, Glycosylation opportunities in drug development, Copenhagen (Denmark), June 11-14, 2007
20th American Peptide Symposium, Montreal (CANADA), June 26-30, 2007.

- Date **2006**
- Congress 29th European Peptide Symposium, Gdansk (Poland), September 3-8, 2006.

- Date **2005**
- Congress Multiple Sclerosis Lab Retreat, 21-23 January, Fattoria Pieve a Salti (Buonconvento, Italy) .
19th American Peptide Symposium, San Diego (USA), June 18-23, 2005.
XVIII International Symposium on Glycoconjugates, Firenze, September 4-9, 2005. (Italy)

- Date **2003**
- Congress XXI Congresso Nazionale della Società Chimica Italiana, Torino, June 22-27, 2003. (Italy)
18th American Peptide Symposium, Boston (USA), July 18-23, 2003. (Italy).

- Date **2002**
- Congress 27th European Peptide Symposium, Sorrento (NA), August 31–September 6, 2002. (Italy)
XXVIII Convegno Nazionale della Divisione di Chimica Organica della Società Chimica Italiana, Roma, September 16-20, 2002. (Italy)
Corso sulla Sclerosi Multipla: Orientamenti e Strategie, Firenze, December 14, 2002. (Italy)

- Participation to WORKSHOP**
- Date **2018**
- Congress Course Biacore™ Basics, Assay Development and Kinetic Evaluation November 2018, Sesto Fiorentino (Italy)

- Date **2011**
- XII Convegno-Scuola sulla chimica dei carboidrati, Certosa di Pontignano (SI), 20-23 June 2010. (Italy)

- Date **2009**
- Congress Tecnologia Innovativa che rivoluzionerà la cromatografia liquida, September 24, Sesto Fiorentino. (Italy)
Cosmeto vigilanza: Problematiche dei protagonisti della filiera, alla luce delle nuove direttive, December 3, Firenze. (Italy)

- Date **2006**
- Congress Satellite Symposium Muvaperd, Mucosal Vaccines for poverty related diseases. January 13, Siena. (Italy)

- Date **2004**
- Springs columns-Cromatografia preparative HPLC May 12, 2004

- Date **2003**
- Congress Course teorico/ Pratico sulla compressione ed utilizzo della tecnica SPE. March 5, Firenze

- Date **2002**

PERSONAL SKILLS AND COMPETENCES

Language	English
Technical skills and competences	<p>Synthesis of molecules of biological and pharmaceutical interest. Organic synthesis, carbohydrate and peptide chemistry. Unnatural amino acids orthogonally protected for peptide synthesis (constrained amino acids, glycosyl and lipophilic amino acids). Solid-phase peptide synthesis chemistry. MW-assisted organic and peptide synthesis. Peptide cleavage and purification.</p> <p>Production of active pharmaceutical peptide ingredients by MW-technology. Synthetic & semi-synthetic strategies of co- or post-translationally modified proteins. Characterization of aberrant post-translational modifications (glycosylation, glycation, lipoylation, etc.) in antigens triggering immune-mediated diseases</p> <p>Glycoconjugates as diagnostic and prognostic tools for human, animal, and plant diseases</p> <p>Characterization and purification technique. Qualitative and quantitative analysis of analyte in the biological fluid (urine and serum).</p> <p>Development of quantitative methods for small molecules, i.e. endocrine disruptors (EDCs), peptides on biological matrix. Purification technique and preparation of samples from biological matrix, instrumental chromatographic techniques and their optimization, management and optimization of instrumental parameters, obtaining quantitative data and analysis of results. Determination of unknown substances with instrumental techniques such as: NMR, FT-IR, UV, UPLC, HPLC-MS, Solid Phase Extraction (SPE), affinity chromatography. Development of immunoenzymatic tests.</p> <p>Experience in the field of research and in the writing of scientific content</p> <p>Analytical methods: Flash Chromatography (Biotage) Peptide analysis: Kaiser test, HPLC-UV-MS, AA analysis HPLC, UPLC, LC-MS, ESI-MS, NMR, UV, IR. Biology: test ELISA for detection of antibody.</p>
Computer skills and competences	<p>Windows. Software: Elaborazione testi (Microsoft Word, Acrobat); Fogli elettronici (Excel); GraphPad. Grafica (Power Point, ChemDraw, Paint shop); Databases (SciFinder, ISI Web of Knowledge, Chemical Abstract, Medline, Pubmed); Chromatography Software: MassLynx, Empower, Chromeleon, Xcalibur.</p>

Scientific contributions and Publications

- 39 articles in scientific journals;
- 1 International Patent;
- 30 articles in books;
- 37 Abstract su rivista;
- 24 Oral Comunications; 40 Poster.

BIBLIOMETRIC PARAMETERS:

ORCID: orcid.org/0000-0001-9908-5996

Other IDs

Scopus Author ID: 6602497461

ResearcherID: L-6282-2015

Web of Science ResearcherID: L-6282-2015

(Web of Science, 18/03/2022)

Results found: 87

Total Times Cited: 594

h-index : 13

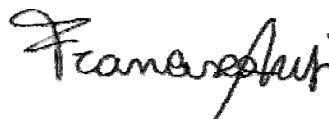
Dichiarazione sostitutiva di certificazione e dichiarazione sostitutiva dell'atto di notorietà ai sensi del D.P.R. 445/28.12.2000.

La sottoscritta FRANCESCA NUTI nata a Prato il 18/04/1975 residente in via G. Marchini, 28 Prato (PO)

consapevole delle responsabilità penali cui può andare incontro, in caso di dichiarazioni mendaci, ai sensi e per gli effetti di cui all'art. 76 del D.P.R. 445/2000 e consapevole che, ai sensi dell'art. 13, del Regolamento UE 2016/679 (GDPR), la presente dichiarazione sarà pubblicata sul sito web dell'amministrazione in apposita sezione di Amministrazione Trasparente, sotto la propria responsabilità

dichiara

ai sensi degli artt. 46 e 47 del DPR 445/2000



Prato, 23 August 2024