

EUROPEAN
CURRICULUM VITAE
FORMAT



PERSONAL
INFORMATION

Name	LINDA MONACI
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Nationality	Italian
Date of birth	08-27-1971

WORK EXPERIENCE

Dates	
	12/2008 to date
Name and address of employer	National Research Council of Italy (NRC) Institute of Sciences of Food Production (ISPA) Via Amendola 122/O, Bari
Type of business or sector	Food Safety and Quality
Occupation or position held	Researcher

Main activities and
responsibilities

Main responsibilities/experience in the laboratory

- Coordinating the team on allergens/proteomics
- Development of LC-HRMS and 2DHPLC-MS/MS methods for identification and characterization of food allergens.
- Development of biosensing systems for allergens detection
- Responsible of the Mass Spectrometry laboratory.
- Experience in laboratory management, accreditation principles and requirements, drafting laboratory procedures and working instructions.
- Contributing to the implementation of the quality assurance scheme and safety measures in the chemistry laboratory.

- Tutoring students for the preparation of experimental thesis or doctoral thesis in Chemistry/Biotechnology.
- Training the staff for the correct functioning of MS instruments.
- Dealing with acquisition of new equipments (organizing demo, testing performances of instruments and drawing reports).
- Teacher of training courses in MS analysis.
- Drafting reports and scientific publications.
- Ensure international scientific networking in the field of food safety.

Major subjects: analytical chemistry, mass spectrometry/proteomics, biosensors, food control (major contaminants: allergens, mycotoxins, pathogen metabolites).

<p>Dates</p> <p>Name and address of employer</p> <p>Type of business or sector</p> <p>Occupation or position held</p> <p>Main activities and responsibilities</p>	<p>01/2005 –10/2008</p> <p>European Commission, Joint Research Center Institute for Reference Materials and Measurements Retieseweg 111 – B 2440 Geel (Belgium). Food Safety and Quality</p> <p>Contractual agent</p> <ul style="list-style-type: none"> • Design and carry out laboratory experiments. • Support the research program of the Unit. • Experience with ISO9001 and ISO/IEC 17025. • Contribute to the production of reference materials. Support the planning and the organization of feasibility studies, homogeneity and stability studies of reference materials. • Experience with certified reference materials. • Build-up restricted databases. • Investigate on sample pre-treatment strategies for the extraction and purification of food allergens. • Develop chromatographic methods coupled to mass spectrometric techniques for the analysis and characterization of proteins in food products. • Characterization of proteins by MS and tandem MS/MS. • Carry out purification/fractionation and proteolytic digestions of protein mixtures. • Production of model food matrices and incurred food models. • Write internal reports and scientific publications.
<p>Dates</p> <p>Name and address of employer</p> <p>Type of business or sector</p> <p>Occupation or position held</p> <p>Main activities and responsibilities</p>	<p>04/2004 – 10/2004</p> <p>Agrarian Faculty, University of Bari (Italy) Via Amendola 70126 Bari (Italy) Department of Agro-forestal and Environmental Biology and Chemistry</p> <p>Research contract</p> <ul style="list-style-type: none"> • Study the interaction between phenolic acids and humic acids. • Optimization of chromatographic methods (HPLC and GC) for the detection of phenolic acids in soil extracts.
<p>Dates</p> <p>Name and address of employer</p> <p>Type of business or sector</p> <p>Occupation or position held</p> <p>Main activities and responsibilities</p>	<p>06/2002-06/2004</p> <p>Department of Chemistry – University of Bari. Via Orabona 4, 70125 Bari (Italy). Analytical chemistry</p> <p>Post-doctoral grant-holder in Chemistry</p> <ul style="list-style-type: none"> • Develop HPLC/DAD UV and fluorimetric methods for detection of mycotoxins in food products. • Develop HPLC-MS/MS methods based on ion trap MS for the detection of mycotoxins in food products.

- Perform in house validation of the HPLC-UV/MS methods.
- Carry out a comparison between ELISA and HPLC/FLD method for detection of mycotoxins in animal food products.
- Carry out a survey to monitor the contamination level of mycotoxin ochratoxin A in meat products collected in different European countries.

EDUCATION

<p>Dates</p> <p>Name and type of organisation providing education and training</p> <p>Principal subjects/occupational skills covered</p> <p>Title of qualification awarded</p>	<p>1998-2001</p> <p>Doctoral school in Food Hygiene and Technology, Faculty of Veterinarian Medicine, Valenzano, Bari (IT).</p> <p>Department of Chemistry, Analytical Chemistry group – University of Bari. Via Orabona 4, 70125 Bari (Italy).</p> <p>PhD student</p> <p>Subjects: analytical chemistry, mass spectrometry, food chemistry, health science</p> <p>PhD in 2001</p>
<p>Dates</p> <p>Name and type of organisation providing education and training</p> <p>Title of qualification awarded</p> <p>Principal subjects/skills covered</p>	<p>1992-1998</p> <p>University of Bari (IT) Via Orabona 4, 70125 Bari (IT).</p> <p>University degree in Biological Sciences with mark 110/110. Analytical Chemistry/Chromatography/Mass Spectrometry</p>

PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE

ITALIAN

Other languages

ENGLISH, FRENCH

Self-assessment

European level ()*

English

French

Understanding		Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production	
	C1		C1		C1		C1
	B2		B2		B1		B1

FIELD OF EXPERTISE AND ADDITIONAL INFORMATION

- Analytical chemistry/ Food contaminants/ Proteomics / Experience with ISO 9001 and ISO 17025.
- Experience in scientific writing and drafting reports.
- Experience in project management.
- Reviewer of the journals: Food chemistry, Journal of chromatography, J of Agricultural and Food Chemistry, Food Control, Food Additives and Contaminants.
- Reviewer of national funded projects.
- Collaboration with FDA (US) on MS methods for food allergens detection.
- Collaboration with Thermo-Fisher for the development of MS based methods also using MSIA technology for monitoring food allergens contamination.

ORGANISATIONAL
SKILLS

- Planning and organizing capacities
- Good management of a laboratory of chemistry
- Coordination, communication and networking skills
- Ability to conceptualise problems, identify and implement solutions.
- Aptitude to work in synergy with others and across organisational boundaries

INVITATIONS AND
GRANTS

- Porto (Spain) 16-18 September 2015. 5th MoniQA International Conference Food and Health – Risks and benefits. Keynote lecture Advances in analytical methods for food allergens detection: where to go?
- Charleston (US) 3-7 November. Invited speaker at the 30th Montreux Symposium Food allergens & safety testing 2014. “Advances in MS method for food allergen detection in foods”.
- Barcelona (Spain) 28-30 October 2014 Food Analysis congress: invited speaker. “ From single to multiple detection of allergens in food by advanced MS analysers”.
- Rome (It) .12-15 October 2014. 1st Imekofoods international congress “Next generation MS based methods applied to the multi allergen screening in foods”
- Budapest (HU), 26 February – 1 March 2013: chairman of the food allergen session at the 5th MoniQA International conference.
- San Diego (US) 25-29 March 2012: invited speaker at the Symposium focused on Advances in food allergen detection organized by the American Chemical Society. Oral presentation: “New frontiers of mass spectrometry: high resolution MS applied to food allergen detection”.
- Prague (Czech Rep) 1-4 November 2011: invited seminar at the 5th edition of RAFA conference. Oral presentation “Feasibility of an Exactive Orbitrap system equipped with a high collision dissociation chamber for a reliable identification of food allergens”.
- Norwich (UK), April-May 2010: visiting scientist grant at the Institute of Food Research to contribute to the MoniQA project within the food allergen working group.

FUNDED
PROJECTS

2015-2017 NATIONAL PROJECT FUNDED BY MIUR. S.WHEAT PRO. PROTEOMIC CHARACTERIZATION OF SELECTED DURUM WHEAT CULTIVARS FOR THE PRODUCTION OF LOW-TOXICITY FOOD PRODUCTS TOWARDS CELIAC DISEASE PATIENTS.

2013-2015 NATIONAL FUNDED PROJECT. "New technologies for food safety and to preserve the food chain in a global scenario" SAFE & SMART. CTN01_00230_248064. Task leader of the activities on food allergens.

2013-2014 COLLABORATION PROJECT WITH THERMO-FISHER SCIENTIFIC. CHARACTERIZATION AND QUANTIFICATION OF MAJOR FOOD ALLERGENS BY HPLC-MSⁿ. Linda Monaci Principal Investigator.

2012-2015 NATIONAL FUNDED PROJECT "Development of innovative food products by biotechnological and technological based solutions (PRO_INNOBIT) PON02_00186_3417037. *Investigation of technological procedures for obtaining a whey-based drink at low risk for allergic consumers.*

2011-2015 NATIONAL FUNDED PROJECT. "New strategies for improvement of food safety, prevention control correction" (S.I.Mi.S.A.) Task leader of the activities on food allergens PON02_00186_34147512. OS 2.2

2009-2013 Large collaborative project DREAM "Design and development of realistic food models with well characterized micro- and macro- structure and composition" funded by EC. Task leader.

2007-2008 Extension of the Exploratory Research Project funded by the European Commission "Detection of potentially allergenic peptides from bovine milk enzymatic hydrolysates in food matrices by a proteomic approach".

2006-2007 Exploratory Research Project funded by the European Commission "Detection of peptides derived from milk hydrolysates by proteomic and immunochemical approaches".

2008-2012 Network of excellence "Monitoring and quality assurance of food" funded by EC. She took part in the food allergen working group aimed to standardize and harmonize analytical methods for the detection of allergens in food.

2001. Coordinator of a project for young researchers funded by University of Bari "Development of analytical methods based on solid phase microextraction for the determination of *Penicillium* mycotoxins in food products".

PUBLICATIONS/
WEBINARS

WEBINARS:

1. High resolution mass spectrometry tailored to multi-allergen detection , Linda Monaci, sponsored by Thermo-Fisher, March 2013.
2. Features of different mass analysers applied to the multi-allergen screening, Linda Monaci, sponsored by Thermo Fisher, May 2014.

INTERNATIONAL PUBLICATIONS IN PEER-REVIEWED JOURNALS: 45

POSTERS/COMMUNICATIONS IN INTERNATIONAL/NATIONAL CONFERENCES:60

BOOK CHAPTERS: 2

SELECTED PUBLICATIONS:

1. Monaci L., De Angelis E., Bavaro S.L. and Pilolli R. High resolution Orbitrap™ based Mass Spectrometry for rapid detection of peanuts in nuts. *Food Additives Contaminants A*, DOI 10.1080/19440049.2015.1070235.
2. Monaci L., Quintieri L., Caputo L., Visconti A., Baruzzi F. Rapid profiling of antimicrobial compounds characterizing *B. subtilis* TR50 cell-free filtrate by High Resolution-single stage –Mass Spectrometry,

submitted to Rapid Communications in Mass Spectrometry, 2015, in press.

3. Monaci L., Garbetta A., De Angelis E., Visconti A., Minervini F. Assessment of toxic potential of mycotoxin contaminated bread during in vitro human digestion on human B lymphoid cell line, *Toxicology Letters*, 2015, 232, 106-112.
4. Caputo L., Quintieri L., Bianchi DM., Decastelli L., Monaci L., Visconti A., Baruzzi F. Pepsin-digested bovine lactoferrin prevents Mozzarella cheese blue discoloration caused by *Pseudomonas fluorescens*. *Food Microbiology* 2015, 46, 15-24.
5. Monaci L., Pilolli R., De Angelis E., Godula M., Visconti A. Multi-allergen detection in food by micro high-performance liquid chromatography coupled to a dual cell linear ion trap mass spectrometry. *J. Chromatography A*, 2014, 1358, 136-144.
6. Pilolli R., Visconti A., Monaci L. Development of a surface-plasmon-resonance-based-biosensor for a rapid and label-free detection of egg-allergen traces in wines, *Analytical and Bioanalytical Chemistry*, DOI 10.1007/s00216-015-8607-4
7. Monaci L., Pilolli R., De Angelis E., Godula M., Visconti A. Multi-allergen detection in food by micro high-performance liquid chromatography coupled to a dual cell linear on trap mass spectrometry. *J. Chromat. A*. 2014, 1358, 136-144.
8. De Angelis E., Monaci L., Visconti A. Investigation on the stability of deoxynivalenol and DON-3 glucoside during gastro-duodenal in vitro digestion of a naturally contaminated bread model food. *Food Control*, 2014, 43, 270-275.
9. Monaci L., Losito I., De Angelis E., Pilolli R., Visconti A. Multiallergen quantification of fining-related egg and milk proteins in white wines by high-resolution mass spectrometry. *Rapid Communications in Mass Spectrometry* 2013, 27, 2009-2018.
10. Pilolli R., Monaci L., Visconti A. Advances in biosensor development based on integrating nanotechnology and applied to food-allergen management. *Trends in Analytical Chemistry*, 47, 2013, 12-26.
11. Monaci L., Brohée, M., Tregoat, V., van Hengel, A. Influence of baking time and matrix effects on the detection of milk allergens in cookie model food system by ELISA. *Food Chemistry*, 2011, 127, 669-675.
12. Monaci L. and A. Visconti, Mass spectrometry-based proteomics methods for analysis of food allergens, *Trends in Analytical Chemistry*, 2009, 28, 581-591.
13. Monaci L., Tregoat V., van Hengel A., E. Anklam. Milk allergens, their characteristics and their detection in food: a review *Journal of European Food Research Technology*, 2006, 223, 149-179.