



## PERSONAL INFORMATION

Name CHELI FEDERICA  
Address VIA VAL CAFFARO, 2 – 20134 MILANO – I  
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Nationality ITALIAN

Date of birth 20/11/1960

## WORK EXPERIENCE

Dates 2005 →  
Occupation or position held Full Professor of Animal Nutrition  
Main activities and responsibilities Teaching and research  
Head of Animal Feed Laboratory  
Name and address of employer **University of Milan (UNIMI), Department of Health, Animal Science and Food Safety**  
Type of business or sector Animal nutrition

Dates 1998 - 2005  
Occupation or position held Associate Professor of Animal Nutrition  
Main activities and responsibilities Teaching and Research. Responsible for teaching graduate and undergraduate courses in animal nutrition.  
Name and address of employer University of Milan, Department of Veterinary Science for Food Safety  
Type of business or sector Animal nutrition

Dates 1988 – 1998  
Occupation or position held Researcher  
Main activities and responsibilities Research in the field of the quality and safety of animal products  
Name and address of employer University of Milan, Veterinary Faculty  
Type of business or sector Animal nutrition

## EDUCATION AND TRAINING

Dates	2005
Title of qualification awarded	Visiting fellow
Principal subjects/occupational skills covered	Biotec laboratory working on food safety
Name and type of organisation providing education and training	ENEA Casaccia – Rome - Italy
Dates	1995
Title of qualification awarded	Visiting fellow
Principal subjects/occupational skills covered	Biotec laboratory working on milk proteases
Name and type of organisation providing education and training	University of Vermont, VT, USA
Dates	1993
Title of qualification awarded	Visiting fellow
Principal subjects/occupational skills covered	Biotec laboratory working on mammary cell culture
Name and type of organisation providing education and training	University of California, Davis, CA, USA
Dates	1989
Title of qualification awarded	PhD in Cellular and Molecular Biology
Principal subjects/occupational skills covered	Researches on extracellular matrices (biochemistry and histology)
Name and type of organisation providing education and training	University of Milan
Dates	1985
Title of qualification awarded	Post-graduated specialization course in Applied Biology
Principal subjects/occupational skills covered	Researches on extracellular matrices (biochemistry and histology)
Name and type of organisation providing education and training	University of Milan
Dates	1983
Title of qualification awarded	Degree in Biological Sciences
Principal subjects/occupational skills covered	Histology and electron microscopy
Name and type of organisation providing education and training	University of Milan

<b>PERSONAL SKILLS AND COMPETENCES</b>	
Mother tongue	ITALIAN
Other languages	
Reading skills	ENGLISH Excellent
Writing skills	Good
Verbal skills	Good
SOCIAL SKILLS AND COMPETENCES	Good ability to adapt to multicultural environments: positive experience of living together in Italy and USA.
ORGANISATIONAL SKILLS AND COMPETENCES	Organization and development of multimedia teaching courses Coordinator of National Research Programs Coordination of a team of technicians working in my dept laboratory
TECHNICAL SKILLS AND COMPETENCES	Technical skills and competences in the field of instrumental analysis
COMPUTER SKILLS AND COMPETENCE	Good knowledge of Microsoft Office Tools, database searching
ADDITIONAL INFORMATION S	<p><b>Main research projects</b></p> <p>2017 Electronic nose as a diagnostic tool for mycotoxin contamination in cereals and oil seeds. Project with ATPr&amp;d S.r.l. Society (manager). 2013: Mycotoxin repartitioning in wheat byproducts (component) Progetto MIUR 6674 (2004-2008) Quality and safety of durum wheat and byproducts: chemical analysis and diagnostic tools of mycotoxin and heavy metal contamination (component) 2012 Edible vaccines for pigs (component) 2011 Development of a lateral flow device for the detection of infective agents of mastitis (component) FIRST 2007 Tobacco cake as alternative protein source in pig feeding (manager) FIRST 2006 Electronic nose for mycotoxin detection in corn (manager) PRIN 2005-2007 Bioactive molecule as antioxidant protection of OTA cytotoxicity: in vitro models (component) FIRST 2005 Feed safety: innovative analytical approach (manager) PRIN 2003-2005 Milk parameters associated to mammary gland health in small ruminants (manager)</p> <p>Responsible for Quality management – Veterinary biotechnology course Head of the Joint Committee of Professors and Students (L-38 - Allevamento e Benessere Animale ABA – Scienze delle Produzioni Animali SPA e LM-86 Scienze e Tecnologie delle Produzioni Animali STPA). Member of the teaching college of the PhD in Nutrition Associate Editor of the Italian Journal of Animal Science Editorial Board Member of the American Journal of Nutrition and Food Science and of the Editorial series “Produzioni animali e sicurezza alimentare” Expert for FAO/WHO on Hazards Associated with Animal Feed 2015 – Reviewer for French National Research Agency (ANR). 2012 - Reviewer for FIRB PROJECTS 2012 Coordinated by CNR 2011 - Reviewer of PROGETTO SPECIALE “Ricerca di Eccellenza – Ricercatori” ANNO 2011 - Università degli Studi di Teramo e la Fondazione Cassa di Risparmio della Provincia di Teramo 2009 - Reviewer for Regione Emilia Romagna - PRRIT (Programma regionale per la ricerca industriale, l'innovazione e il trasferimento tecnologico)</p>

Reviewer for Animal, Small Ruminant Research, Toxins, Italian Journal of Animal Science, LWT - Food Science and Technology, Food Chemistry, CBP, European Journal of Medicinal Plants, Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources  
Member of the Science and Animal Production Association  
Members of the International Society for Mycotoxicology (ISM),  
University Service: research and teaching Committees in Animal Science and Nutrition; Master degree in Veterinary Biotechnology Sciences (UNIMI): Quality Responsible; Bachelor and Master degree in Animal Science (UNIMI): President of the Professors-Students Joint Committee.

#### **Research activity**

Author of 190 publications (see Archivio Istituzionale della Ricerca: [https://air.unimi.it/simple-search?query=cheli+federica&location=&sort\\_by=score&order=desc&rpp=10&etal=0&start=180#.WvrBcrcUns0](https://air.unimi.it/simple-search?query=cheli+federica&location=&sort_by=score&order=desc&rpp=10&etal=0&start=180#.WvrBcrcUns0)). Source SCOPUS: Documents:74; Citations: 1063 by 868 by 868 documents; h-index: 19. Source WOS: Documents:58; Citations: 813 by 667 documents; h-index: 16.

#### **Research topics:**

- Nutrition and quality of animal products
- Mycotoxins in feed and food
- Quality and safety of feedstuffs (analytical methods, electronic nose, image analysis)
- Nutrition and biology of the mammary gland
- Animal nutrition and immunity

#### **Most relevant publications (last 5 years)**

Giromini, C., Cheli, F., Rebucci, R., Baldi, A. 2019. Invited review: Dairy proteins and bioactive peptides: Modeling digestion and the intestinal barrier. *Journal of Dairy Science*, 102 (2), 929-942.

Di Rosa, A.R., Leone, F., Cheli, F., Chiofalo, V. 2018. Novel approach for the characterisation of Sicilian honeys based on the correlation of physico-chemical parameters and artificial senses. DOI:10.1080/1828051X.2018.1530962. pp.1-9. In ITALIAN JOURNAL OF ANIMAL SCIENCE –

Ottoboni, M., Pinotti, L., Tretola, M., Giromini, C., Fusi, E., Rebucci, R., Grillo, M., Tassoni, L., Foresta, S., Gastaldello, S., Furlan, V., Maran, C., Dell'Orto, V., Cheli, F. 2018. Combining E-Nose and Lateral Flow Immunoassays (LFIA) for Rapid Occurrence/Co-Occurrence Aflatoxin and Fumonisin Detection in Maize. *Toxins Open Access*, 10, 16 October 2018.

Cheli, F., Bontempo, V., Pinotti, L., Ottoboni, M., Tretola, M., Baldi, A., Dell'Orto, V. 2018. Feed analysis and animal nutrition: Electronic nose as a diagnostic tool. *Chemical Engineering Transactions*, 68, 223-228.

Hejna M., Gottardo D., Baldi A., Dell'Orto V., Cheli F., Zaninelli M., Rossi L. 2018. Review: Nutritional ecology of heavy metals. *Animal*, <https://doi.org/10.1017/S175173111700355X> - Published online: 08 January 2018, pp. 1-15.

Fusi E., Giromini C., Rebucci R., Pinotti L., Caprarulo V., Cheli F., Vitari F., Domeneghini C., Baldi A. 2018. Ochratoxin A cytotoxicity on Madin-Darby canine kidney cells in the presence of alpha-tocopherol: Effects on cell viability and tight junctions. *J Anim Physiol Anim Nutr*, 102, 350–355.

Di Rosa A.R., Leone F., Cheli F., Chiofalo V. 2017. Fusion of electronic nose, electronic tongue and computer vision for animal source food authentication and quality assessment - A review. *Journal of Food Engineering*, 210, 62-75.

Cheli F., Bontempo V., Dell'Orto V. 2017. E-nose and E-tongue: an Analytical Tool for Quality Control and Management in the Pet Food Industry. *Sensors & Transducers*, 213, 24-29.

Cheli F., Pinotti L., Novacco M., Ottoboni M., Tretola M., Dell'Orto V. 2017. Mycotoxins in Wheat and Mitigation Measures. In *Wheat Improvement, Management and Utilization*. Edited by Ruth Wanyera and James Owuoche, ISBN 978-953-51-3152-6, Publisher: InTech, Chapter 11. 227-251.

Ottoboni M., Tretola M., Cheli F., Marchis D., Veys P., Baeten V., Pinotti L. 2017. Light microscopy with differential staining techniques for the characterisation and discrimination of insects versus marine arthropods processed animal proteins. *Food Additives & Contaminants: Part A*, 34, 1377-1383.

Pinotti L., Ottoboni M., Caprarulo V., Giromini C., Gottardo D., Cheli F., Fearn T., Baldi A. 2016. Microscopy in combination with image analysis for characterization of fishmeal material in aquafeed. *Anim. Feed Sci. Tech.* 215, 156-164.

Cheli F., Pinotti L., Ottoboni M., Tretola M., Dell'Orto V. 2016. Cereal Industry: e-Nose for Real Time and Online Quality and Safety Control and Management. *Sensors & Transducers*, 201, 52-58.

Pinotti L., Ottoboni M., Giromini C., Dell'Orto V., Cheli F. 2016. Mycotoxin Contamination in the EU Feed Supply Chain: A Focus on Cereal Byproducts. *Toxins*, 8, 45-69.

Cheli F., Giromini C., Baldi A. 2015. Mycotoxin mechanisms of action and health effects: "in vitro" or "in vivo" tests, that is the question. *World Mycotoxin Journal*, 8:5, 573-589.

Dell'Orto V., Baldi G., Cheli F. 2015. Mycotoxins in silage: checkpoints for effective management and control. *World Mycotoxin Journal*, 8:5, 603-617.

Pulina G., Battacone, G., Brambilla, G., Cheli, F., Danieli, P.P., Masoero, F., Pietri, A., Ronchi, B. 2014. An update on the safety of foods of animal origin and feeds. *Italian Journal of Animal Science*, 13:4, 845-856.

Ottoboni M., Cheli F., Amato G., Marchis D., Brusa B., Abete M.C., Pinotti L. 2014. Microscopy and image analysis based approaches for the species-specific identification of bovine and swine bone containing material. *Italian Journal of Animal Science*, 13:2, 377-381.

Cheli F., Fusi E., Baldi A. 2014. Cell-based models for mycotoxin screening and toxicity evaluation: an update. *World Mycotoxin Journal*, 1, 1-14.

Bontempo V., Jiang X.R., Cheli F., Lo Verso L., Mantovani G., Vitari F., Domeneghini C., Agazzi A. 2014. Administration of a novel plant extract product via drinking water to post-weaning piglets: effects on performance and gut health. *Animal*, 8, 721-730.

Mura S., Carta D., Roggero P.P., Cheli F., Greppi G.F. 2014. Nanotechnology and its applications in Food and Animal Science. *Italian journal of food science*, XXVI, 91-102.

Cheli F, Battaglia D, Gallo R, Dell'Orto V. 2014. EU legislation on cereal safety : an update with a focus on mycotoxins. *Food control*, 37, 315-325.

Pinotti L, Fearn T, Gulalp S, Campagnoli A, Ottoboni M, Baldi A, Cheli F, Savoini G, Dell'Orto V. 2013. Computer image analysis: an additional tool for the identification of processed poultry and mammal protein containing bones *Food additives & contaminants. Part A, Chemistry, analysis, control, exposure & risk assessment*, 30, 1745-1751.

Cheli F, Campagnoli A, Dell'Orto V. 2013. Fungal populations and mycotoxins in silages: From occurrence to analysis. *Animal feed science and technology*, 183, 1-16.

Cheli F, Pinotti L, Rossi L, Dell'Orto V. 2013. Effect of milling procedures on mycotoxin distribution in wheat fractions: a review. *LWT - Food Science and Technology*, 54, 307-314.

Rossi L, Fusi E, Baldi G, Fogher C, Cheli F, Baldi A, Dell'Orto V. 2013. Tobacco Seeds By-Product as Protein Source for Piglets. *Open journal of veterinary medicine* 3, 73-78.

Cheli F, Gallo R, Battaglia D, Dell'Orto V. 2013. EU legislation on feed related issues: an update. *Italian Journal of Animal Science* 12, 295-312.

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