

# Europass Curriculum Vitae

## Personal information

First name/ Surname **Maria Mazza**

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Telephone

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Nationality

Date of birth

Gender

## Current qualifications **Biologist at the Genetics and Immunobiochemistry Laboratory of IZSPLV**

### Work experience *November 2003 to present date*

- Biologist manager at the National Reference Laboratory for Transmissible Spongiform Encephalopathies (CEA) – IZSPLV.
- Participation to evaluation, application and standardization of diagnostic screening tests and confirmatory methods, as required by the Regulation (EC) 999/2001 for the prevention, control and eradication of transmissible spongiform encephalopathies.
- Trainer and technical supporter of the staff within the Italian laboratories on the rapid screening tests applied to the diagnosis of BSE and Scrapie.
- Participation in the activity of diagnostic confirmation and molecular characterization of BSE and Scrapie cases identified by the network of the IIZZSS laboratories.

### *June 2000 – October 2003*

- Fellow biologist – CEA
- Research activity in a study pilot conducted in the Piedmont region on the acquisition and development of the rapid test "Prionics-Check" in order to operate, in according to the EC guidelines, an active surveillance of BSE in Italy.

### *December 1993 – October 1997*

- Researcher - Istituto per la Cerealicoltura (QCE), Rome, Italy
- Research activities on the selection and the genetic improvement of wheat.

### *January 1991 – August 1992*

- Fellow biologist - different hospitals in Rome and Turin
- Training on the different techniques applied for the clinical analyses and prenatal diagnosis.

## Education and training

### *December 1997*

- Specialization in Genetics Applied (70/70), University "La Sapienza" of Rome, Italy

### *November 1988*

- Degree in "Biological Science" (110/110 *cum laude*), University of Messina, Italy

## Personal skills and competences

Since 2000 she is working in the field of analytical techniques applied to diagnosis and molecular discrimination of BSE and Scrapie strains. Particularly in recent years she has gained experience in new highly sensitive amplification techniques for an *ante-mortem* diagnosis of the these prion disease.

She has expertise in proteomic approaches, mainly by bi-dimensional electrophoresis (2DE), in different field regarding the animal health and food safety (allergens, anabolic treatments in veals).

During last years she published scientific articles on these fields.

Mother tongue(s)	High experience in the laboratory quality management system in according to the standard ISO 17025. <b>Italian</b>
Other language(s)	<b>English, fluent</b>
Technical skills and competences	High experience in immunobiochemical techniques applied to the diagnosis and characterization of TSE strains. Experience in research project management.
Computer skills and competences	Operating system – Windows. Microsoft Applications – Word, Excel, Power Point, Internet Explorer.
<b>Additional information</b>	Speaker at national congress on topics related to the diagnosis activity and the research.
<b>References</b>	Author or co-author of 27 scientific articles published on peer-reviewed international journals; of 18 scientific articles published on national journals and more than 90 papers presented as posters in several national and international conferences.

#### Most relevant references

1. Favole A, Mazza M, Vallino Costassa E, D'Angelo A, Lombardi G, Marconi P, Crociara P, Berrone E, Gallo M, Palmitessa C, Orrù CD, Caughey B, Acutis PL, Caramelli M, Casalone C, Corona C. Early and Pre-Clinical Detection of Prion Seeding Activity in Cerebrospinal Fluid of Goats using Real-Time Quaking-Induced Conversion Assay. *Sci Rep.* 2019 Apr 16;9(1):6173. doi: 10.1038/s41598-019-42449-7.
2. Vallino Costassa E, D'Angelo A, Mazza M, Meloni D, Baioni E, Maurella C, Colussi S, Martinelli N, Lo Faro M, Berrone E, Favole A, Crociara P, Grifoni S, Gallo M, Lombardi G, Iulini B, Casalone, Corona C. (2018). Clinical, pathological, and molecular features of classical and L-type atypical-BSE in goats. *PLOS ONE* | <https://doi.org/10.1371/journal.pone.0198037> May 24, 2018
3. Maria Mazza, Chiara Guglielmetti, Francesco Ingravalle, Sonia Brusadore, Jan P.M. Langeveld, Loukia V. Ekateriniadou, Olivier Andréoletti, Cristina Casalone and Pier Luigi Acutis (2017). Low fraction of the 222K PrP variant in the protease-resistant moiety of PrPres in heterozygous scrapie positive goats. *Journal of General Virology* DOI 10.1099/jgv.0.000843
4. Corona C, Costassa EV, Iulini B, Caramelli M, Bozzetta E, Mazza M, Desiato R, Ru G, Casalone C. (2017). Phenotypical Variability in Bovine Spongiform Encephalopathy: Epidemiology, Pathogenesis, and Diagnosis of Classical and Atypical Forms. *Prog Mol Biol Transl Sci.* 2017;150:241-265. doi: 10.1016/bs.pmbts.2017.06.015. Epub 2017 Aug 10
5. Barbara Iulini, Elena Vallino Costassa, Cristiano Corona, Daniela Meloni, Alessandra Favole, Maria Mazza, Maria Caramelli, Cristiana Maurella and Cristina Casalone (2017). Classical and Atypical Bovine Spongiform Encephalopathy: Epidemiology, Pathogenesis and Diagnosis. Chapter 1 from the book *Prion – An overview - INTECH*
6. Anne-Balkema-Buschmann, Grit Priemer, Markus Keller, Maria Mazza, Bob Hills, Martin H. Groschup (2016). Intra- and Interspecies Transmission of atypical BSE – What can we learn from it? *Food Safety*, doi: 10.14252/foodsafetyfscj.2016023.
7. Orrù C.D., Favole A., Corona C, Mazza M., Manca M., Groveman B.R., Hughson A.G., Acutis P.L., Caramelli M., Zanusso G., Casalone C., and Caughey B. Detection and Discrimination of Classical and Atypical L-type Bovine Spongiform Encephalopathy by Real-Time Quaking-Induced Conversion. *J Clin Microbiol.* 2015 Apr;53(4):1115-20.
8. Mazza M., Guglielmetti C., Pagano M., Sciuto S., Ingravalle F., Martucci F., Caramelli M., Acutis P.L. (2012). Lysine at position 222 of the goat prion protein inhibits the binding of monoclonal antibody F99/97.6.1. *J. Vet Diagn Invest*, Vol. 24, Number 5, September 2012; pp 970-974.
9. Suardi S., Vimercati C., Casalone C., Gelmetti D., Corona C., Iulini B., Mazza M., Lombardi G., Moda F., Ruggerona M., Campagnani I., Piccoli E., Catania M., Groschup M.H., Balkema-Buschmann A., Caramelli M., Monaco S., Zanusso G., Tagliavini F. (2012). Infectivity in skeletal muscle of cattle with atypical bovine spongiform encephalopathy. *PLoS One* 2012;7(2):e31449.
10. Poli G, Corda E, Lucchini B, Puricelli M, Martino PA, Dall'ara P, Villetti G, Bareggi SR, Corona C, Costassa EV, Gazzuola P, Iulini B, Mazza M, Acutis P, Mantegazza P, Casalone C, Imbimbo BP. (2012). Therapeutic effect of CHF5074, a new  $\gamma$ -secretase modulator, in a mouse model of scrapie. *Prion* 2012 Jan 1;6(1).
11. M. Mazza, B. Iulini, G. Vaccari, P.L. Acutis, F. Martucci, E. Esposito, S. Peletto, S. Barocci, B. Chiappini, C. Corona, I. Barbieri, M. Caramelli, U. Agrimi, C. Casalone, R. Nonno (2010). Co-existence of classical scrapie and Nor98 in a sheep from an Italian outbreak. *Res. Vet. Sci.*,

2010, Jun;88(3):478-85.

12. Tomoko Hosokawa, Kotaro Tsuchiya, Ichiro Sato, Natsumi Takeyama, Susumu Ueda, Yuichi Tagawa, Kumiko M Kimura, Izuru Nakamura, Guoying Wu, Akikazu Sakudo, Cristina Casalone, Maria Mazza, Maria Caramelli, Hidehiro Takahashi, Tetsutaro Sata, Katsuaki Sugiura, Andreina Baj, Antonio Toniolo, and Takashi Onodera (2008). A monoclonal antibody (1D12) defines novel distribution patterns of prion protein (PrP) as granules in nucleus. *Biochemical and Biophysical Research Communications* 366 (2008): 657-63.
13. Jorg G. Jacobs, Jan P.M. Langeveld, Anne-Gaelle Biacabe, Pier-Luigi Acutis, Miroslaw P.Polak, Dolores Gavier-Widen, Anne Buschmann, Maria Caramelli, Cristina Casalone, Maria Mazza, Martin Groschup, Jo H. F. Erkens, Aart Davidse, Fred G. van Zijderveld and Thierry Baron (2007). Molecular discrimination of atypical bovine spongiform encephalopathy strains from a geographical region spanning a wide area in Europe. *J. of Clinical Microbiology*, June 2007, p. 1821-1829.
14. Acutis P.L., Martucci F., Mazza M., Peletto S., Iulini B., Corona C., Bozzetta E., Casalone C., Caramelli M. (2006). A case of scrapie in a sheep carrying the lysine-171 allele of the prion protein gene. *Archives of Virology* 151:1875-1880.
15. P. L. Acutis, F. Martucci, M. Mazza, S. Nodari, C. Maurella, G. Ru, C. Casalone, M. Caramelli (2005). Molecular typing of small ruminant TSE cases from Italian outbreaks. *Veterinary Record*, 2006 Nov 25;159(22):746-7.
16. Cristina Casalone, Cristiano Corona, Maria Ines Crescio, Francesca Martucci, Maria Mazza, Giuseppe Ru, Elena Bozzetta, Pier Luigi Acutis and Maria Caramelli (2005). Pathological prion protein in the tongues of sheep infected with naturally occurring Scrapie. *Journal of Virology*, Vol. 79 (No 9): 5847-5849.
17. E. Bozzetta, PL Acutis, F. Martucci, R. Nappi, C. Casalone, M. Mazza, M. Caramelli (2004). Evaluation of BSE Rapid tests for the diagnosis of Transmissible Spongiform Encephalopathies in sheep and goats. *Acta Neuropathol.* 107: 559-562.

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