

EUROPEAN
CURRICULUM VITAE
FORMAT



PERSONAL INFORMATION

Name **CHESSA, STEFANIA**
Address **DEPARTMENT OF VETERINARY SCIENCE
UNIVERSITY OF TURIN
LARGO PAOLO BRACCINI, 2
10095 GRUGLIASCO (TO)
ITALY**
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Nationality Italian

WORK EXPERIENCE

- Dates (from - to) **FROM DECEMBER 2021**
- Name and address of the employer
Department of Veterinary Science, University of Turin
Largo Paolo Braccini, 2, 10095 Grugliasco (TO), Italy
- Type of business or sector
Animal Genetics and Breeding
- Occupation or position held
Associate Professor
- Main activities and responsibilities
Development and application of molecular and statistical approaches for the analysis of animal genetic variability and its relationship with diseases, quality traits, traceability, and welfare, and exploitation and conservation of biodiversity of livestock animals and their related products
Coordinator of the research project
 - miRNA role in the cow-calf communication funded by Fondazione CRT (2021-2023)

- Dates (from - to) **FROM DECEMBER 2018 TO NOVEMBER 2021**
- Name and address of the employer
Department of Veterinary Science, University of Turin
Largo Paolo Braccini, 2, 10095 Grugliasco (TO), Italy
- Type of business or sector
Animal Genetics and Breeding
- Occupation or position held
Researcher
- Main activities and responsibilities
Coordinator of the research projects
 - Development of the IEF technique for the analysis of bovine individual and bulk milk samples funded by the Piedmont regional breeders' association (ARAP)" (2019-2022)
 - Evaluation of the effects of different diets on horse intestinal metagenome and miRNome - funded by the Department of Veterinary Science of the University of Turin (2019-2021)**Participant** in the research projects
 - TECH4MILK Project - Innovative technologies and solutions for promoting the competitiveness and sustainability of Piedmontese milk supply chain funded by POR-FESR (2014-2020)

- Dates (from - to) **FROM DECEMBER 2009 TO NOVEMBER 2018**
- Name and address of the employer
Institute of Agricultural Biology and Biotechnology – National Research Council, Milan, Italy
Via Einstein, 26900, Lodi, Italy
- Type of business or sector
Animal Genetics and Breeding
- Occupation or position held
Researcher

- Main activities and responsibilities

Development and application of new molecular techniques for the analysis of genetic variability and its effects on quality traits, traceability, welfare, exploitation and conservation of biodiversity of livestock animals and their related products

Coordinator of the research projects

- ANAFI (National Association of Holstein Breeders) contract, referred to PSRN project – National Rural Development Program “Le razze bovine da latte per la definizione di modelli selettivi sostenibili (Latteco)” (2014-2020)
- Il latte d’asina di razza Amiatina nella gestione del bambino con allergia alle proteine del latte vaccino: aspetti innovativi, clinici, allergologici e nutrizionali (L.A.B.A.Pro.V.) funded by Tuscany Region (2017)
- AIA (Italian Breeders Association) contract titled “ β -casein genetic variants quantification in bulk milk samples” (2016-2017)
- Miglioramento delle condizioni di allevamento, gestione alimentare e valutazione della diffusione delle varianti genetiche nelle bovine da latte funded by Centrale del Latte di Torino (2016)

Participant in the research projects

- Horizon 2020 Project Hypatia: Gender tools for more STEM careers in collaboration with Museo Nazionale della Scienza e della Tecnologia Leonardo Da Vinci Foundation, Milano (2015-2018)
- Accordo Quadro CNR-Regione Lombardia project Innovative and sustainable strategies for the agricultural food chain (FilAgro) – WP7 Animal breeding, mammary gland transcriptome analysis, and rumen metagenome (2013-2015)
- GenHome: Technological Resort for the advancement of animal genomic research (2012-2014)
- Interomics Development of an integrated platform for the application of "omic" sciences to biomarker definition and theranostic, predictive and diagnostic profiles – Novel bioinformatics methods for the integration and management of 'omics' data and for the innovation of knowledge in medical clinic and biotechnology (2012-2015)
- InnovaGen: Research and innovation in livestock molecular selection to increase the competitiveness of the national animal breeding sector. WP Research and use of associations between SNPs and quantitative and quality traits of sheep and goat milk & WP Training and updating of the farmers organization on the use of molecular genetic tools in livestock selection (2011-2013)
- CISIA: Integrated Knowledge for Sustainability and Innovation of “Made in Italy” in the Agroalimentary System "Genetic and functional characterization of autochthonous pig breeds in Southern Italy for the valorization of local products and for the conservation of biodiversity - WP1 Genomic characterization for the valorization of small populations and their products (2011-2013)
- Accordo Quadro CNR-Regione Lombardia: Biological resources and innovative technologies for the sustainable development of the Agroalimentary System. WP High-throughput genotyping of cattle breeds for diagnostics and selection (2008-2012)
- FEARS - Rural Development Programme 2007-2013 "Information and Knowledge Dissemination" - New tools for the improvement and valorization of traditional dairy products from Valtellina (2011)

- Dates (from - to)

- Name and address of the employer

- Type of business or sector

- Occupation or position held

- Main activities and responsibilities

FROM FEBRUARY 2005 TO DECEMBER 2009

Department of Veterinary Science and Technology for Food Safety, University of Milan
Via Celoria 10, 20133 Milano, Italy

Animal Genetics and Breeding

Post-doc Research Fellowship

Participant in the following research projects:

- Accordo Quadro CNR-Regione Lombardia: Biological resources and innovative technologies for the sustainable development of the Agroalimentary System. WP High-throughput genotyping of cattle breeds for diagnostics and selection (2008-2012).
- FEARS - Rural Development Programme 2007-2013 "Information and Knowledge Dissemination" - New tools for the improvement and valorization of traditional dairy products from Valtellina (2011)
- COFIN 2007: Aspects of Small Ruminant Production with Particular Impact on Human Health (2008-2010)

- SelMol: Research and innovation in breeding activities with molecular genetics techniques for the competitiveness of the national animal husbandry system (2007-2010).
- COFIN 2005: Aspects of technological and nutritional quality value of sheep and goat milk (2006-2008)
- COFIN 2005: Microarray analysis of the casein cluster and LGB locus in the Italian Brown and Simmenthal cow breeds for new selection objectives (2006-2008)
- QuCaSu: Objective parameters for the economic and quality characterization of the carcass in heavy pigs (2005-2007)
- Cariplo Foundation: Characterization of goat milks with different characteristics in terms of nutritional values and technological properties for niche productions (2004-2007)

EDUCATION AND TRAINING

- Dates (from - to)
- Name and type of organisation
 - Principal subjects covered
 - Title of qualification awarded

2001-2004

Dept. of Veterinary Science and Technology for Food Safety, University of Milan
Molecular Genetics and Bioinformatics
PhD in Animal Production Science

- Dates (from - to)
- Name and type of organisation
 - Principal subjects covered
 - Title of qualification awarded

1996-2001

Veterinary Faculty of the University of Milan
Animal Production Science
Degree in Animal Production Science with full marks and honors

PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE(S)

ITALIAN

OTHER LANGUAGE(S)

ENGLISH

- Understanding – Writing - Speaking

ADVANCED – ADVANCED - ADVANCED

FRENCH

- Understanding – Writing - Speaking

ADVANCED – INTERMEDIATE - INTERMEDIATE

GERMAN

- Understanding – Writing - Speaking

INTERMEDIATE – INTERMEDIATE - ELEMENTARY

SOCIAL SKILLS
AND COMPETENCES

Excellent interpersonal skills, demonstrated by communicating with students, colleagues and non-technical professionals on a daily basis
Able to work individually and also as a dedicated member of a team whenever required
High flexibility and adaptability, tenacity and perseverance
Good at observation and listening
Ability to identify common problems and deal with new problems

ORGANIZATIONAL SKILLS
AND COMPETENCES

Good at assigning tasks based on team member skill sets acquired also as members of the board of a sporting club and in voluntary associations
Strong in organizational skills, multitasking and prioritizing work tasks to respect deadlines

TECHNICAL SKILLS
AND COMPETENCES

Ability in the detection and analysis of milk protein genetic variability in cattle, sheep and goat acquired at the beginning of the research career, then enlarged to the detection of genes and mutations related with animal breeding at different levels: products quality, animal welfare, evolutionary studies, conservation of biodiversity, and animal health

Laboratory skills necessary for the analysis of biological samples from extraction, purification and quantification of protein, DNA and RNA, to the testing through the application of traditional (isoelectrofocusing, bi-dimensional, agarose, and denaturing electrophoresis, PCR, AS-PCR, PCR-RFLP, PCR-SSCP, multiplex PCR, RT-PCR, etc.) and new molecular techniques (genotyping microarrays, next generation sequencing)

Informatics, bio-informatic, and statistic skills for the analysis of the different data acquired with the laboratory activities with tools for biological and molecular data analysis such as Entrez NCBI (Genome, Protein, Nucleotide Database e PubMed), BLAST Search, EH, Genepop, Fstat,

Dispan, SAS system, R project with many different R packages for the analysis of high-throughput data (DNA microarray, BeadChip, NGS)
Basic knowledge of programming languages (Pascal, MATLAB, PERL)
Fluent use of the word and graphic processing, and data analysis programs for Macintosh, Windows and Linux environments

DRIVING LICENCE(S)

Car owner, license B

ADDITIONAL INFORMATION

TEACHING

Academic years
2018-2019, 2019-2020,
2020-2021, 2021-2022
2022-2023

Teaching assignments for the following bachelor and master degree courses at the University of Turin:

- LIVESTOCK BREEDING AND GENETIC IMPROVEMENT
- MANAGEMENT OF BIODIVERSITY IN BREEDS AT RISK OF ABANDONMENT
- COMPUTERIZED MANAGEMENT OF ANIMAL PRODUCTIONS
- NUTRIGENOMICS IN ANIMAL SCIENCE (course in English language)
- RUMINANT FEEDING AND NUTRITION (course in English language)

Academic years
2017-2018 & 2018-2019

Temporary Lecturer position in Zootechnical and Veterinary Biotechnology for the Biotechnology bachelor degree at the University of Brescia (Italy)

From 2008

Teaching assistant S.S.D. AGR/17 (Animal genetics and breeding), for bachelor and master degree courses at the University of Milan

From 2006

Teaching assistant S.S.D. AGR/17 (Animal genetics and breeding) for bachelor and master degree courses at the University of Brescia

OTHER ACTIVITIES

Seminars

Invited speaker for more than 25 events involving breeders, students of different degrees, researchers and consumers, including the participation in a TV show, all concerning her research activities (especially on milk quality)

Further training

Training courses attended about molecular genetics, animal products for human consumption, statistics, data analysis, and precision farming

Period abroad to refine the research skills at the Department of Animal Breeding and Genetics of the Justus-Liebig University in Giessen (Germany)

Editorial activities

Reviewer for many journals, such as J. Dairy Sci., Mol. Biol. Rep., J. Anim. Breed Genet., Small Rumin. Res., Livest. Sci., Genet. Mol. Biol., Ital. J. Anim. Sci., Afr. J. Biotechnol

Member of the Editorial Board of the Italian Journal of Animal Science from 2019 to 2023

BIBLIOMETRIC PARAMETERS

Total publication in Scopus

73

Scopus H-index

26

Scopus Citations

>2100

Orcid

<https://orcid.org/0000-0001-9720-5982>

Patents

Brevetto n. MI2006A000529 - PATENT n. WO/2007/107862. Inventors: Castiglioni B., Chessa S., Pagnacco G. Method for the identification of bovine milk protein polymorphisms

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV

Grugliasco, June, 2023

Stefania Chessa

