

# CURRICULUM VITAE - CECCHINATO MATTIA

## EDUCATION AND QUALIFICATIONS

October 2013: De Facto member of the European College of Poultry Veterinary Science  
July 2010: Specialization diploma in “Animal health, husbandry and production” - Veterinary Medicine Faculty, University of Bologna (Italy);  
June 2005: “Doctor in Philosophy” (PhD) in “Epidemiology and Zoonosis Control” - Veterinary Medicine Faculty, University of Bologna (Italy); Final dissertation: “Studies on Avian Pneumovirus infectious in poultry farms in Italy”;  
November 2001: Qualification in Veterinary Surgery;  
July 2001: Doctor in Veterinary Medicine (DVM) - Veterinary Medicine Faculty, University of Padua (Italy).

## WORK EXPERIENCE

- March 2021 -Present: Full Professor at the Department of Animal Medicine, Production and Health, University of Padua;  
- January 2018 – March 2021: Associate Professor at the Department of Animal Medicine, Production and Health, University of Padua;  
- March 2006- December 2017: Researcher at the Veterinary Medicine Faculty (Scientific-disciplinary field: VET/05 - Infectious Diseases of Domestic Animals), University of Padua;  
- February 2006: Funded research “Development and standardization of molecular methods for the Avian Metapneumovirus Diagnosis” at Department of Veterinary Public Health and Animal Pathology - Veterinary Medicine Faculty - University of Bologna (Italy);  
- February 2005 – January 2006 Funded research “Avian Metapneumovirus infection in breeders: epidemiological studies and prophylactic measures for the control of drop in eggs production” at Department of Veterinary Public Health and Animal Pathology - Veterinary Medicine Faculty - University of Bologna (Italy);  
- January 2002 - December 2004: Funded research (PhD) at Department of Veterinary Public Health and Animal Pathology - Veterinary Medicine Faculty - University of Bologna (Italy)  
- December 2001- January 2002: Voluntary work at the Virology Laboratory of the Istituto Zooprofilattico Sperimentale delle Venezie under the supervision of Dr. Ilaria Capua.

## MAJOR RESEARCH/PROFESSIONAL INTERESTS

Avian diseases of poultry and game birds. Epidemiology and pathology studies of viral disease of birds using serology, virology, histology and molecular techniques. In particular infections due to viruses belonging to Paramixoviridae and Coronaviridae. In details: epidemiological studies in poultry farms and in wild birds; molecular characterisation of Italian Avian Metapneumovirus (AMPV) and Infectious Bronchitis virus (IBV) strains; development of new molecular tests for AMPV and IBV diagnosis; prophylaxis of AMPV and IBV infections, in particular field and experimental studies on AMPV vaccine reversion to virulence. Furthermore management and control measures of emerging diseases such as Avian Influenza and West Nile diseases.

## Additional information

Field experience: comprehensive knowledge of intensive rearing and husbandry of poultry, poultry egg incubation; intensive rearing, husbandry and reintroduction of game birds. Monitoring techniques (environmental and animal sampling) in poultry, industrial hatcheries, egg production centres, game bird and ostrich farms. Clinical and post-mortem diagnosis in birds.

Laboratory experience: Preparation of samples for bacteriological and virological examination for routine diagnostic procedures; preparation of culture media for bacterial isolation and cell culture for virus isolation; procedures for the isolation, biotyping and serotyping of the most common avian bacteria (i.e. Salmonella spp.); procedures for the isolation of avian viruses in embryonated eggs, primary avian cell cultures and in chicken embryo tracheal organ cultures (TOC); identification of avian viruses using Haemagglutination Test, Haemagglutination Inhibition Test, Indirect Immunoperoxidase, Virus Neutralization, Direct and Indirect Immunofluorescence, Polyacrilamide Gel Electrophoresis; serological diagnosis of some avian diseases using Rapid Agglutination Test, Agar Gel Immunodiffusion Test, Haemagglutination Inhibition Test, Serum Neutralization Test, ELISA Test; Electrophoretic analysis (PAGE) of the viral dsRNA of Rotavirus; Reverse Transcriptase-Polymerase Chain Reaction, Real-time PCR, Agarose Gel Electrophoresis and Sequencing of Newcastle Disease, Coronavirus and Avian Pneumovirus viruses; Development and validation of PCRs and Real-time PCRs; bioinformatics skills (phylogentic, phylodynamic analysis). Additionally, rudimentary knowledge of the tools required for Next Generation Sequencing (NGS) data analysis: use of already freely available softwares for the evaluation of for NGS data quality (FastQC), read trimming (Trimmomatic), alignment to reference genome (Bowtie2 and SAMtools) and sub-population study (ShoRAH and QUASR).

## VISIT TO FOREIGN RESEARCH LABORATORIES

Two research grants founded by University of Bologna ("Progetto Marco Polo") for training of young researchers in foreign University (Department of Veterinary Pathology, University of Liverpool-UK):

- Project title: "Development of live attenuated vaccine for Turkey Rhinotracheitis using reverse genetics"(March-July 2003);
- Project title: "Role of F and G superface proteins glycosylation in the AMPV tropism" (May- September 2006).

## SCIENTIFIC DISTINCTIONS AND AWARDS

- Houghton Trust Lecture - international award given to young researchers who have significantly contributed to research in the field of avian pathology - report entitled "Strategies and challenges in infectious bronchitis control and diagnosis" presented on 18 September 2019 at WVPAC, Bangkok, Thailand .

- Abstract awarded at the 11th International Congress for Veterinary Virology - 12th Annual Meeting of EPIZONE. Title of the scientific work: Does vaccination of pregnant cows against Bovine Viral Diarrhea viruses confer fetal protection against Hobi-like Pestivirus infection? Authors: Belfanti I., Decaro N., Lucente MS, Buonavoglia C., Giammarioli M., Lucchese L., Cecchinato M., Martini M., Schiavo M., Ceglie L., Nardelli S., 2018. 11 ° International Congress for Veterinary Virology - 12th Annual Meeting of EPIZONE 27-30 August 2018, University of Veterinary Medicine, Vienna, Austria.

- 10-11 December 2009 – Best scientific paper during the V° Workshop Nazionale di Epidemiologia Veterinaria Epidemiologia, Torino. Title of the work: "Protocollo sanitario e gestionale in un focolaio di Leptospirosi in un allevamento di bovine da latte in Veneto". Authors: Tommaso Patregnani, Lebona Bonfanti, Anselmo Ferronato, Giulio Bucci, Mattia Cecchinato, Letizia Ceglie, Alda Natale.

- September 2005 – Maria, Giuseppe and Ing. Giuseppe Zanella awards for the best thesis (Phd thesis) on Avian pathology in the years 2004-05.

## GRANT

2012 – "Houghton Trust LTD" providing grants for young researchers on avian diseases for attendance at 61st Western Poultry Diseases Conference, Arizona, USA.

2007 – "Houghton Trust LTD" providing grants for young researchers on avian diseases for attendance at XV World Veterinary Poultry Congress, Beijing, China.

## PATENT

March 2017 – Italy patent number 102017000031092 - Method for predicting cross-protection between Infectious Bronchitis strains – Inventors= Mattia Cecchinato and Giovanni Franzo.

## PRINCIPAL INVESTIGATOR OF RESEARCH PROJECT FUNDED BY COMPETITIVE GRANT

- Research project: "BVD-3 in the bovine population of North-Eastern Italy: prevalence, clinical impact, pathogenesis in pregnant cows and characterization of the strains" Founded by Italian Ministry of Health (10.450,00 euro) - Period: September 2015 - August 2018.

- Research project: "Control of Campylobacter spp. in broiler" Founded by Veneto Region (34.500,00 euro) - Period: September 2016 - August 2017.

- Research project: "Infectious bronchitis: epidemiological analysis, genomic and antigenic characterization and evolution studies" Founded by Italian Ministry of Health (10.000,00 euro) - Period: December 2016 - December 2018.

- Research project: "Classical and molecular epidemiology of canine parvovirus strains identified in Italy" Founded by Department of Animal Medicine, Production and Health, University of Padua; (20.000,00 euro) - Period: January 2017 - December 2018.

- Research Grants - Project title: "Role of F and G superface proteins glycosylation in the AMPV tropism" Period: May-September 2006 and Project title: "Development of live attenuated vaccine for Turkey Rhinotracheitis using reverse genetics" Period: March-July 2003; Founded by University of Bologna ("Progetto Marco Polo").

## PRINCIPAL INVESTIGATOR OF RESEARCH PROJECTS Funded by companies or Institution

- Research project: "Technical training for diagnosis, genotyping and quantification of Avian Infectious Bronchitis Virus (IBV)". – Founded by Ceva Sante Animale Romania (4.000 euro) – Period: March 2020-March 2021.

- Research project: "Epidemiological survey on Infectious Bronchitis in Romania" – Founded by Ceva Sante Animale Romania (6.000 euro) – Period: December 2019-December 2020.

- Research project: “Epidemiological survey on Infectious Bronchitis in Romania” – Founded by Ceva Sante Animale Romania (6.000 euro) – Period: October 2018-December 2019.
- Research project: “Technical training for diagnosis, genotyping and quantification of Avian Infectious Bronchitis Virus (IBV)” – Founded by Ceva Santé Animale b.v., Netherland (4.000 euro) – Period: September-December 2018.
- Research project: “Develop and validate a new PCR assay (or series of assays) to detect the Ceva TRANSMUNE Winterfield 2512 strain by rtRT-PCR – Founded by CEVA Animal Health (5.000 euro) – Period: September-December 2018.
- Research project: “Master Services Agreement” – with Ceva Sante Animale S.A – Period: March 2018 - March 2023).
- Research project: “Epidemiology survey on Infectious Bronchitis in Poland” – Founded by CEVA Animal Health, Polska (8.000 euro) – Period: February-June 2018.
- Research project: “Epidemiology survey on Infectious Bronchitis in Romania” – Founded by CEVA Santé Animal, Romania (6.000 euro) – Period: September-December 2017.
- Research project: “Epidemiology survey on Infectious Bronchitis in Italy” – Founded by Zoetis, Italy S.r.l (5.590 euro) – Period: July -November 2017.
- Research project: “Evaluation of vaccines kinetic and interference of different Infectious bronchitis vaccination programs” – Founded by CEVA Salute Animale, Italy (17.756 euro) – Period: November 2015 -October 2017.
- Research project: “Epidemiology survey on Infectious Bronchitis and characterization of the strain identified in broiler and layers that include the vaccine CEVAC IBIRD in the vaccination program ” – Founded by CEVA Salute Animale, Italy (30.000 euro) – Period: November 2015 -October 2017.
- Research project: “Technical training for diagnosis, genotyping and quantification of Avian Infectious Bronchitis virus” – Founded by CEVA Santé Animal, UK (3.000 + 3.000 euro) – Period: June-December 2016 and Febraury-May 2017.
- Research project: “Infectious Bronchitis vaccine kinetics study” – Founded by CEVA Santé Animal (16.000 euro) – Period: May-October 2016.
- Research project: “Evaluation during longitudinal studies of the kinetics and efficacy of the IBV vaccination program that include NOBILIS® IB 4/91 in broiler” Founded by MSD Animal Health s.r.l. (1.500 euro) – Period: April – June 2016.
- Research project: “Evaluation during longitudinal studies of the kinetics and efficacy of the vaccine NOBILIS® IB Primo QX in broiler” Founded by MSD Animal Health s.r.l. (1.200 euro) – Period: April – May 2016.
- Research project: “Evaluation of the vaccine NOBILIS® IB Primo QX administered in combination with H120/Ma5 vaccines in broiler” Founded by MSD Animal Health s.r.l. (1.400 euro) – Period: December 2015.
- Research project: “Prevalence evaluation of aMPV infection in poultry and in human occupationally exposed to poultry ” Founded by Istituto Zooprofilattico Sperimentale delle Venezie (15.000 euro) - Period: September - December 2015.
- Research project: “Evaluation of the vaccine NOBILIS® IB Primo QX in broiler” Founded by MSD Animal Health s.r.l. (2.250 euro) – Period: April - October 2015.
- Research project: “Phylogenetic analysis of poultry and swine viruses responsible of diseases that have an economic impact for the animal production chains” – Funded by University of Padua – Period: year 2014-2015 and 2017-2018.
- Research project: “Impact of coccidiosis control program and feeding plan on white striping prevalence and severity degree on broiler breast fillets” Founded by MSD Animal Health s.r.l. (13.000 euro) – Period: May - December 2014.
- Research project: “Infectious bronchitis virus epidemiological survey on broiler farms in Northern Italy” – Founded by CEVA Animal Health (20.000 euro) – Period: February-June 2014 and December 2014 – January 2016.
- Research project: “Analysis of epidemiological data and analysis of data derived from the annual monitoring programme for Avian Influenza and the vaccination programme against rabies” – Founded by Istituto Zooprofilattico Sperimentale delle Venezie (15.000 euro + 15.000 euro) – Period: September 2011- September 2013.
- Research project: “Phylogenetic analysis of Psittacine Beak and Feather Disease (Pbfd) and Avian Polyomavirus viruses” – Funded by University of Padua (6.048 euro) – Period: year 2012-2013.
- Research project: “Development of real-time PCR for the diagnosis of Avian Metapneumovirus” – Funded by University of Padua (5.633 euro) – Period: year 2011-2012.
- Research project: “Analysis of epidemiological data and control measures of Avian Influenza outbreaks” – Founded by

Istituto Zooprofilattico Sperimentale delle Venezie (10.770 euro) – Period: October 2010- August 2011.

- Research project: “Control of Avian Influenza: biosecurity measures and surveillance programmes” – Founded by Istituto Zooprofilattico Sperimentale delle Venezie (72.000 euro) – Period: May 2007 - September 2010.

PARTECIPANT in other 13 RESEARCH PROJECTS: founded by UE (1), Italian Ministry of Health (1); Ministry of Education, University and Research (1); Veneto Region (1); University of Padova (5), University of Bologna (4), Fondazione Cariverona (1).

#### REVIEWER FOR SCIENTIFIC JOURNAL

- Vaccine;
- The Virology Journal;
- Journal of Virological Methods;
- Journal of Veterinary Research;
- Pakistan Journal of Zoology;
- British Poultry Science;
- Avian Pathology;
- World's Poultry Science Journal;
- Infection, genetics and evolution;
- OIE Revue Scientifique et Technique.

REVIEWER FOR RESEARCH PROJECT of the Institut Pasteur De Tunis.

#### NATIONAL COLLABORATION

- Department of Veterinary Medical Sciences, Alma Mater Studiorum - University of Bologna, Italy, Prof. Elena Catelli and Dr. Caterina Lupini.
- Istituto zooprofilattico sperimentale delle Venezie – Padua –Italy, Dr. Lebana Bonfanti, Dr. Salvatore Catania, Dr. Letizia Ceglie.
- Gruppo veronesi (AIA), Verona, Italy.
- Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna – Brescia–Italy, Dr. Ana Moreno and Dr. Antonio Lavazza.
- Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna – Forlì–Italy, Dr. Paola Massi and Dr. Giovanni Tosi.

#### INTERNATIONAL COLLABORATION

- College of Veterinary Medicine and Agriculture of Addis Ababa Univeristy, Ethiopia – Prof. Gezahegne Mamo.
- Department of Virology, Faculty of Veterinary Science, university of Istanbul, Turkey, AYSUN YILMAZ e PROF. HÜSEYİN YILMAZ.
- Department of Infection Biology, Institute of Infection and Global Health, Faculty of Health and Life Sciences, University of Liverpool, Neston, United Kingdom, Dr. Clive Naylor.
- Department of Poultry Diseases, Faculty of Veterinary Science, University of Thessaly, Greece – Prof. Kostantinos C. Koutoulis.
- Directorate of Veterinary center of Thessaloniki, Ministry of Rural Development and Food, Thessaloniki, Greece, Dr. Chaligianis Ilias.
- Centre De Recerca en Sanitat Animal, Cresa & Department De Sanitat I anatomia Animals, Universitat Autònoma De Barcelona, Barcelona, Spain, Prof. Natalia Majo.
- Department of preventive Veterinary Medicine and Animal Health, School of Veterinary Medicine, Universiti of Sao Paulo, Brazil, Prof. Paulo Eduardo Brandao.
- ESAC – Centre De sanitat Avicola De Catalunya I Arago, Reus, Spain, Dr. Angel Blanco.
- INRA & Université de Toulouse, Toulouse, France, Dr. Mariette F. Ducatez and Prof. Jean Luc Guerin.
- California Aniaml Health and Food Safety Laboratory system, University of California, USA, Prof. Shivaprasad.

MEMBER of the ORGANIZING COMMITTEE of 1 International congress, 1 European meeting and 12 national congresses.

CHAIRMAN of 1 international meeting, 1 European meeting and 9 national meetings.

SPEAKER at 25 international meetings (11 as invited speaker), 8 national meetings (4 as invited speaker), and 15 technical meetings for poultry company or for veterinaries.

#### ACADEMIC TEACHING

- Since A.Y. 2019/2020 to date “Principles of prevention and control of transmissible animal diseases” for Animal Care Degree, University of Padua.
- Since A.Y. 2018/2019 to date “Livestock 1 “ for Veterinary Medicine Degree, University of Padua.

- Since A.Y. 2009/2010 to date "Epidemiology and control of infectious diseases" for the Food Hygiene and Safety Degree, University of Padua.
- Since A.Y. 2011/2012 to date "Avian Pathology Practical" for Veterinary Medicine Degree, University of Padua.
- Since A.Y. 2014/2015 to A.Y. 2017/2018 "Biotechnology applied on microorganism of veterinary interest" for the Food Biotechnology Degree, University of Padua;
- A.Y. 2006/07-2009/2010: lecture of "Hygiene and Prophylaxis of Infectious Disease" for the Food Hygiene and Safety Degree, University of Padua.
- A.Y. 2005/06: lecture of "Zoonosis" for the Food Biotechnology Degree, University of Padua;
- A.Y. 2005/06: lecture of "Microbiology" for the Health Biotechnology Degree, University of Padua.

- 3 April 2014 and 23 January 2015 (4 hours of teaching – subject: biosecurity in poultry farm), 23 January 2015, 27-20 April 2016 (12 hours of teaching – subject: biosecurity in poultry farm, Avian influenza, vaccines and vaccination in poultry), 26-29 April 2017 (8 hours of teaching – subject: biosecurity in poultry farm, Avian influenza, vaccines and vaccination in poultry), Graduate School in Agriculture and Bio-Engineering, Lille, France.

#### SUPERVISOR/TUTOR ACTIVITY:

- 4 PhD students;
- 8 students grants;
- 37 students for the degree thesis.

#### ACADEMIC COURSES ATTENDED

- 7th September-26th October 2004: "Training course in poultry husbandry and Avian Pathology", organised by the Lombardy and Emilia Romagna Regions Experimental Animal Health Care Institute, Italy.
- 2/3th March 2006: "Cell culture: Basics Methodology and application" organised by pbi International, Milan, Italy.

#### PROFESSIONAL MEMBERSHIPS

- 2016-2018 - Secretary of the Società Italiana di Patologia Aviaria (SIPA) - Italian Section of the "World Veterinary Poultry Association".
- 2019 to date – President of the Società Italiana di Patologia Aviaria (SIPA) - Italian Section of the "World Veterinary Poultry Association".

#### SERVICE, ORGANIZATIONAL AND INSTITUTIONAL ACTIVITIES

- - From 23 March 2018 to date - Responsible for the Erasmus + Agreement with the University of Veterinary Medicine of Hannover for the A.A. 2018-2021.
- 2016-2020 - Member of the Scientific Commission of the area - Area n.8 - Agricultural and veterinary sciences (DECRETE Rep. N.353 - Prot. N. 33777, Year 2017 Tit. II Cl. 27 Fasc. 2).

#### MEMBER OF THE INSTITUTIONAL COMMISSIONS OF THE DEPARTMENT OF ANIMAL MEDICINE PRODUCTION AND HEALTH (MAPS) OF THE UNIVERSITY OF PADUA

- Academic coordinator of the departmental VQR working group for the evaluation of Research Quality 2015-2019 (VQR2015-2019)
- From October 2019 to date - Scientific Research Delegate of the Department of Animal Medicine, Production and Health (Prot. N. 6278 - Year 2019 Tit. II Cl. 4 Fasc. 3 All. 0).

From 22 December 2015 to 7 January 2018 - Member of the MAPS Department Board.

From 2012 to 2015 - Member of the Security Department Commission.

#### HEAD OF DIAGNOSTIC ACTIVITY OF INFECTIOUS DISEASES OF POULTRY - MAPS DEPARTMENT

Since 2017 he has been responsible for the diagnostic activity of poultry infectious diseases (2800 samples analyzed - 160,000.00 euros collected, from 1 June 2017 - to date).

#### MEMBER OF THE INSTITUTIONAL COMMISSIONS OF THE DEGREE COURSE IN FOOD HYGIENE AND SAFETY OF THE UNIVERSITY OF PADUA

- From the academic year 2012-13 to date - Teacher Tutor.
- From 2012 to today - Member of the commission or self-assessment group (GAV) which has the task of annually drafting the self-assessment report of the course of study.
- From 2010 to 2013 - Member of the FSE commission for the activation and management of projects financed with

European Social Funds.

#### DOCTORAL COURSE IN VETERINARY SCIENCES - UNIVERSITY OF PADUA

- From 2013 to today - member of the Board of Professors of the Doctoral Course in Veterinary Sciences of the University of Padua.

- From February 2018 to January 2021 – Vice-Coordinator of the Doctoral Course in Veterinary Sciences of the University of Padua.

- From January 2021 to date - Coordinator of the Doctoral Course in Veterinary Sciences of the University of Padua.

AUTHOR and CO-AUTHOR of about 260 PUBLICATIONS including papers in international referees journals, papers and abstracts published in the proceeding of conferences.

Co-author of the BOOK CHAPTER “Avian Metapneumovirus”, in “Mononegaviruses of Veterinary Importance, Volume 2: Molecular Epidemiology and Control”, Editor Muhammad Munir, CABI International, Oxfordshire, UK, pp. 127-143. ISBN-13: 978 1 78064 417 2

H index (scopus)= 18.

Number of papers published= 85 (Scopus).

Citations= 967 (scopus)

Evaluation of the quality of research (VQR):

- VQR 2004-2010= 2/2 papers evaluated excellent;

- VQR 2011-2014= 2/2 papers evaluated excellent.