

CURRICULUM VITAE OF

Carolina Castagnetti DVM, PhD, Dipl. ECAR, Full professor

PERSONAL INFORMATION

Name and Surname	CAROLINA CASTAGNETTI
Address	Via Garibaldi 3 Bologna
Phone number	+39 051 2097571 +39 320 4620307
E-mail	carolina.castagnetti@unibo.it
Nationality	Italian
Date of birth	10/19/1970

Full Professor of the University of Bologna since September 2020.

Coordinator of the PhD Course in Veterinary Sciences at the Department of Veterinary Medical Sciences (DIMEVET), University of Bologna since April 2022.

Director of the Postgraduate Course in Equine Perinatology of the University of Bologna since AY 2024-2025.

Member of the Interdepartmental Center for Research (CIRI) Life Sciences and Health Technologies (Translational Medicine Unit) of the University of Bologna since 2018.

In August 2024 and March 2018, she was invited to the Dorothy Russell Havemeyer Meeting “Working Group on SIRS and SEPSIS Definitions in the Foal” (consensus statement), at the University of Illinois, Urbana-Champaign (USA).

Head of the Equine Clinical Service of the Veterinary Teaching Hospital “G. Gentile” of the DIMEVET, University of Bologna from January 2015 to April 2024.

She is the founder and head (from 2001 to 2020) of the Equine Perinatology Unit *Stefano Belluzzi* where many critical neonatal foals and mares with high-risk pregnancy are hospitalized every year, with good survival rates.

She carries out her researches in the field of veterinary perinatology, in particular: pathophysiology of perinatal period, placental function, perinatal asphyxia syndrome, sepsis and neonatal intensive care in foals.

Formation

She graduated from the Faculty of Veterinary Medicine of Bologna on July 17th 1997 with 110 points *cum laude* with a thesis in Pathology of Reproduction and Artificial Insemination entitled: "Evaluation of frozen semen of the horse and reproductive results" (Proceedings of the LIII SISVet Conference, Montecatini, September 1999).

During the spring 2000, she attended the Neonatal Intensive Unit of the Mid Atlantic Equine Medical Center (Ringoes, New Jersey, USA), directed by Dr. Wendy Vaala.

She attended many courses and dry labs on Equine Neonatal Medicine.

She received the title of Doctor of Philosophy in Veterinary Obstetrics and Gynecology in 2003 with a thesis entitled "Learning and applying the principles of intensive care in equine perinatology: personal experiences in the years 1999-2002".

She diplomated at the European College of Animal Reproduction (ECAR) in November 2006 (Equine Reproduction).

Academic career

Intern at the Obstetric and Gynecologic Section of the Veterinary Clinical Department of the Faculty of Bologna from May 1998 to March 1999.

Graduated Technician (VII level) at the same Department from April 1999.

Researcher from October 2002 (VET10: Veterinary Obstetrics and Gynecology).

Associate Professor of the DIMEVET, University of Bologna from November 2010 (VET10: Veterinary Obstetrics and Gynecology).

Full Professor of the DIMEVET, University of Bologna from September 2020 (VET10: Veterinary Obstetrics and Gynecology, now MVET 05/B: Veterinary Obstetrics, Gynecology, Andrology and Neonatology).

Research activities

<https://orcid.org/0000-0001-5533-7637>

Total number of publications in criss.unibo.it: 145

Total number of publications in Scopus: 83

Total citations: 1,112

h INDEX: 20

Selected Peer-reviewed Publications

1. Zambelli D., Castagnetti C., Belluzzi S., Bassi S. Correlation between the age of the conceptus and various ultrasonographic measurements during the first 30 days of pregnancy in the domestic cat (*Felis catus*). *Theriogenology*, 2002; 57:1981-1987.
2. Zambelli D., Caneppele B., Castagnetti C., Belluzzi S. Cryopreservation of cat semen in straws: comparison of five different freezing rates. *Reproduction in Domestic Animals*, 2002; 37:310-313.
3. Mari G., Castagnetti C., Belluzzi S. Equine fetal sex determination using a single ultrasonic examination under farm conditions. *Theriogenology*, 2002; 58:1237-1243.
4. Belluzzi S., Galeotti M., Eutizi C.M., Castagnetti C. The correlation between mast cells and some inflammatory mediators in the bovine endometrium. *Veterinary Research Communications*, 2004; 28(S1):165-168.
5. Zambelli D., Buccioli M., Castagnetti C., Belluzzi S. Vaginal and cervical anatomic modifications during the oestrus cycle in relation to transcervical catheterization in the domestic cat. *Reproduction in Domestic Animals*, 2004; 39:76-80.
6. Zambelli D., Castagnetti C., Belluzzi S., Paladini C. Correlation between fetal age and ultrasonographic measurements during the second half of pregnancy in domestic cats (*Felis catus*). *Theriogenology*, 2004; 62:1430-1437.
7. Mari G., Iacono E., Merlo B., Castagnetti C. Reduction of Twin Pregnancy in the Mare by Transvaginal Ultrasound-Guided Aspiration. *Reproduction in Domestic Animals*, 2004; 39:434-437.
8. Castagnetti C., Mariella J., Serrazanetti G.P., Grandis A., Merlo B., Fabbri M., Mari G. Evaluation of lung maturity by amniotic fluid analysis in equine neonate. *Theriogenology*, 2007; 67(9):1455-1462.
9. Castagnetti C., Rossi M., Parmeggiani F., Zanoni R.G., Pirrone A., Mariella J. Facial cellulitis due to *Actinobacillus equuli* infection in a neonatal foal. *Veterinary Record*, 2008; 162(11):347-349.
10. Castagnetti C., Veronesi M.C. Prognostic factors in the sick neonatal foal. *Veterinary Research Communications*, 2008; 32(S1):87-91.
11. Castagnetti C., Rametta M., Tudor Popeia R., Govoni N., Mariella J. Plasma levels of ACTH and cortisol in normal and critically-ill neonatal foals. *Veterinary Research Communications*, 2008; (32:S1):127-129.
12. Mari G., Morganti M., Merlo B., Castagnetti C., Parmeggiani F., Govoni N., Galeati G., Tamanini C. Administration of sulpiride or domperidone for advancing the first ovulation in deep anestrous mares. *Theriogenology*, 2009; 71(6):959-965.
13. Castagnetti C., Pirrone A., Mariella J., and Mari G. Venous blood lactate evaluation in equine neonatal intensive care. *Theriogenology*, 2010; 73(3):343-357.
14. Castagnetti C., Mariella J., Pirrone A., Romagnoli N., Pasquali F., Parmeggiani F., Spadari A. Urethral and bladder rupture in a neonatal colt with uroperitoneum. *Equine Veterinary Education*, 2010; 22(3):132-138.

15. Mari G., Castagnetti C., Rizzato G., Mislei B., Iacono E., Merlo B. Density gradient centrifugation of sperm from a subfertile stallion and effect of seminal plasma addition on fertility. *Animal Reproduction Science*, 2011; 126:96–100.
16. Pirrone A., Castagnetti C., Mariella J., Bonoli C., Stancampiano L., Tampieri M.P., Galuppi R. Yeast flora in oropharyngeal and rectal mucous membranes of healthy and critically ill neonatal foals. *Journal of Equine Veterinary Science*, 2012; 32:93-99.
17. Borchers A., Wilkins P.A., Marsh P.M., Axon J.E., Read J., Castagnetti C., Pantaleon L., Clark C., Qura'n L., Belgrave R., Trachsel D., Levy M., Bedenice D., Saulez M. N., Boston R. C. Association of admission L-lactate concentration in hospitalized equine neonates with presenting complaint, periparturient events, clinical diagnosis and outcome: A prospective multicentre study. *Equine Veterinary Journal*, 2012; 44(S41):57-63.
18. Iacono E., Merlo B., Pirrone A., Antonelli C., Brunori L., Romagnoli N., Castagnetti C. Effects of mesenchymal stem cells isolated from amniotic fluid and platelet-rich plasma gel on severe decubitus ulcers in a septic neonatal foal. *Research in Veterinary Science*, 2012; 93:1439-1440.
19. Pirrone A., Mariella J., Gentilini F., Castagnetti C. Amniotic fluid and blood lactate concentrations in mares and foals in the early postpartum period. *Theriogenology*, 2012; 78:1182-1189.
20. Castagnetti C., Mariella J., Pirrone A., Cinotti S., Mari G., Peli A. Expression of interleukin-1 β , interleukin-8, and interferon- γ in blood samples obtained from healthy and sick neonatal foals. *American Journal of Veterinary Research*, 2012; 73(9):1418-1427.
21. Panzani S., Castagnetti C., Prandi A., Faustini M., Zamboni A., Veronesi M.C. Insulin-like growth factor I: Could it be a marker of prematurity in the foal? *Theriogenology*, 2013; 79:495–501.
22. Mariella J., Castagnetti C., Peli A., Morini M., Sorteni C., Bettini G., Pietra M. Mucosal mRNA cytokines profile of gastric wall in neonatal foals: comparison with endoscopy and histology. *Journal of Equine Veterinary Science*, 2013; 33:977-983.
23. Pirrone A., Panzani S., Govoni N., Castagnetti C., Veronesi M.C. Thyroid Hormone Concentrations in foals affected by Perinatal Asphyxia Syndrome. *Theriogenology*, 2013; 80:624-629.
24. Borchers A., Wilkins P.A., Marsh P.M., Axon J.E., Read J., Castagnetti C., Pantaleon L., Clark C., Qura'n L., Belgrave R., Schwarzwald C., Levy M., Bedenice D., Saulez M.N., Boston R.C. Sequential L-lactate concentration in hospitalized equine neonates: a prospective multicenter study. *Equine Veterinary Journal*, 2013; 45(S45):2-7.
25. Mariella J., Pirrone A., Gentilini F., Castagnetti C. Hematologic and biochemical profiles in Standardbred mares during peripartum. *Theriogenology*, 2014; 81:526–534.
26. Pirrone A., Antonelli C., Mariella J., Castagnetti C. Gross placental morphology and foal serum biochemistry as predictors of foal health. *Theriogenology*, 2014; 81(9):1293-1299.

27. Valentini S., Castagnetti C., Musella V., Spinella G. Assessment of intraocular measurements in neonatal foals and association with gender, laterality, and body weight: a clinical study. *PLoS One*, 2014; 9(10):1-5.
28. Bianco C., Pirrone A., Boldini S., Sarli G., Castagnetti C. Histomorphometric parameters and fractal complexity of the equine placenta from healthy and sick foals. *Theriogenology*, 2014; 82(8):1106-1112.
29. Panzani S., Castagnetti C., Vitiello T., Pirrone A., Scarpa P., Veronesi MC. Antithrombin: Could it be a Diagnostic and Prognostic Marker in Septic Neonatal Foals? *Journal of Equine Veterinary Science*, 2014; 34(10):1211-1217.
30. Cunto M., Zambelli D., Castagnetti C., Linta N., Bini C. Diagnosis and Treatment of Foetal Anasarca in Two English bulldog Puppies. *Pakistan Veterinary Journal*, 2015; 35(2):251-253.
31. Galuppi R., Piva S., Castagnetti C., Iacono E., Tanel S., Pallaver F., Fioravanti M.L., Zanoni R.G., Tampieri M.P., Caffara M. Epidemiological survey on *Cryptosporidium* in an Equine Perinatology Unit. *Veterinary Parasitology*, 2015; 210:10-18.
32. Castagnetti C., Mariella J. Anti-inflammatory Drugs in Equine Neonatal Medicine. Part I: Nonsteroidal Anti-inflammatory Drugs. *Journal of Equine Veterinary Science*, 2015; 35:475-480.
33. Castagnetti C., Mariella J. Anti-inflammatory Drugs in Equine Neonatal Medicine. Part II: Corticosteroids. *Journal of Equine Veterinary Science*, 2015; 35:547-554.
34. Wilkins P.A., Sheahan B.J., Vander Werf K.A., Castagnetti C., Hardy J., Schoster A., Boston R.C. Preliminary Investigation of the Area Under the L-Lactate Concentration-Time Curve (LAC_{AREA}) in Critically Ill Equine Neonates. *Journal of Veterinary Internal Medicine*, 2015; 29(2):659-662.
35. Spinella G., Loprete G., Castagnetti C., Musella V., Antonelli C., Vilar J.M., Britti D., Capitani O., Valentini S. Evaluation of mean echogenicity of tendons and ligaments of the metacarpal region in neonatal foals: A preliminary study. *Research in Veterinary Science*, 2015; 101:11-14.
36. Giordano A., Castagnetti C., Panzani S., Paltrinieri S., Freccero F., Veronesi M.C. Endothelin 1 in healthy foals and in foals affected by neonatal diseases. *Theriogenology*, 2015; 84(5):667-673.
37. Bonelli F., Meucci V., Divers T., Radcliff R., Cunilleras E.J., Corazza M., Guidi G., Tognetti R., Castagnetti C., Intorre L., Sgorbini M. Evaluation of plasma Procalcitonin concentrations in healthy foals and foals affected by Septic Systemic Inflammatory Response Syndrome. *Journal of Equine Veterinary Science*, 2015; 35:645-649.
38. Bonelli F., Castagnetti C., Iacono E., Corazza M., Sgorbini M. Evaluation of Some Physical, Haemathological and Clinical Chemistry Parameters in Healthy Newborn Italian Holstein Calves. *American Journal of Animal and Veterinary Sciences*, 2015; 10(4):230-234.
39. Mariella J., Isani G., Andreani G., Freccero F., Carpenè E., Castagnetti C. Total Plasma Magnesium In Healthy And Critically Ill Foals. *Theriogenology*, 2016; 85(2):180-185.

40. Iacono E., Lanci A., Merlo B., Mariella J., Castagnetti C. Effects of Amniotic Fluid Mesenchymal Stem Cells in carboxymethyl cellulose gel on spontaneous pressure sores healing: clinical outcome in seven hospitalized neonatal foals. *Turkish Journal of Biology*, 2016; 40(2):484-492.
41. Galuppi R., Piva S., Castagnetti C., Sarli G., Iacono E., Fioravanti M.L., Caffara M. Cryptosporidium parvum: from foal to veterinary students. *Veterinary Parasitology*, 2016; 219:53-56.
42. Galuppi R., Piva S., Castagnetti C., Sarli G., Iacono E., Fioravanti M.L., Caffara M. Corrigendum to Cryptosporidium parvum: From foal to veterinary students. *Veterinary Parasitology*, 2016; 221:59.
43. Piva S., Caffara M., Pasquali F., Castagnetti C., Iacono E., Massella E., Zanoni R.G., Galuppi R. Detection and quantification of Cryptosporidium oocysts in environmental surfaces of an Equine Perinatology Unit. *Preventive Veterinary Medicine*, 2016; 131:67-74.
44. Isani G., Ferlizza E., Cuoghi A., Bellei E., Monari E., Bianchin Butina B., Castagnetti C. Identification of the most abundant proteins in equine amniotic fluid by a proteomic approach. *Animal Reproduction Sciences*, 2016; 174:150-160.
45. Freccero F., Mariella J., Lanci A., Cotignoli C., Castagnetti C. Efficacy and Safety of a Commercial Fresh-Frozen Hyperimmune Plasma in Foals with Failure of Passive Transfer of Immunity. *Journal of Equine Veterinary Science*, 2017; 48:174-181.
46. Castagnetti C., Cunto, M., Bini, C., Mariella J., Capolongo, S., Zambelli, D. Time-dependent changes and prognostic value of lactatemia during the first 24 h of life in brachycephalic newborn dogs. *Theriogenology* 94:100-104, 2017.
47. Mariella J., Castagnetti C., Prosperi A., Scagliarini A., Peli A. Cytokine levels in colostrum and in foals' serum pre- and post-suckling. *Veterinary Immunology and Immunopathology*, 2017; 185:34-37.
48. Freccero, F., Baron Toaldo, M., Castagnetti C., Cipone, M., Diana, A. Contrast-Enhanced Ultrasonography of the Uterus During Normal Equine Pregnancy: Preliminary Report in Two Mares. *Journal of Equine Veterinary Science*, 2017; 54:42-49.
49. Mariella J., Iacono E., Lanci A., Merlo B., Palermo C., Morris L., Castagnetti C. Macroscopic characteristics of the umbilical cord in Standardbred, Thoroughbred and Warmblood horses. *Theriogenology*, 2018; 113:166-170.
50. Merlo B., Teti G., Mazzotti E., Ingrà L., Salvatore V., Buzzi M., Cerqueni G., Dicarlo M., Lanci A., Castagnetti C., Iacono E. Wharton's Jelly Derived Mesenchymal Stem Cells: Comparing Human and Horse. *Stem Cell Reviews and Reports*, 2018; 14(4):574-584.
51. Freccero F., Cordella A., Dondi F., Castagnetti C., Niinistö K., Cipone M. Feasibility of the echocardiographic subcostal view in newborn foals: two-dimensional and Doppler aortic findings. *Equine Veterinary Journal*, 2018; 50:865-869.
52. Lanci A., Mariella J., Iacono E., Caffara M., Piva S., Galuppi R., Castagnetti C. Observational Study on Cryptosporidiosis in an Equine Perinatology Unit. *Journal of Equine Veterinary Science*, 2018; 71:51-56.

53. Lanci A., Merlo B., Mariella J., Castagnetti C., Iacono E. Heterologous Wharton's jelly derived mesenchymal stem cells application on a large chronic skin wound in a six-month-old filly. *Frontiers in Veterinary Science*, 2019; 6:9.
54. Lanci A., Castagnetti C., Ranciati S., Sergio C., Mariella J. A regression model including fetal orbit measurements to predict parturition in Standardbred mares with normal pregnancy. *Theriogenology*, 2019; 126:153-158.
55. Quercia S., Freccero F., Castagnetti C., Soverini M., Turrone S., Biagi E., Rampelli S., Lanci A., Mariella J., Chinellato E., Brigidi P., Candela M. Early colonisation and temporal dynamics of the gut microbial ecosystem in Standardbred foals. *Equine Veterinary Journal*, 2019; 51(2):231-237.
56. Savini F., Gallina L., Mazza F., Mariella J., Castagnetti C., Scagliarini A. Molecular Detection of Bovine Papillomavirus DNA in the Placenta and Blood of Healthy Mares and Respective Foals. *Veterinary Sciences*, 2019; 6(1):14.
57. Lauteri E., Mariella J., Beccati F., De Graaf-Roelfsema E., Castagnetti C., Pepe M., Peric T., Barbato O., Montillo M., Rouge S., Freccero, F. Ultrasonographic measurement of the adrenal gland in neonatal foals: Reliability of the technique and assessment of variation in healthy foals during the first five days of life. *Veterinary Record*, 2020; 187(12):1-6.
58. Ellero N., Freccero F., Lanci A., Morini M., Castagnetti C., Mariella J. Rhabdomyolysis and Acute Renal Failure Associated with Oxytetracycline Administration in Two Neonatal Foals Affected by Flexural Limb Deformity. *Veterinary Sciences*, 2020; 7, 160:1-10.
59. Sgorbini M., Freccero F., Castagnetti C., Mariella J., Lanci J., Marmorini P., Camillo F. Peripartum findings and blood gas analysis in newborn foals born after spontaneous or induced parturition. *Theriogenology*, 2020, 158:18-23.
60. Ellero N., Lanci A., Ferlizza E., Andreani G., Mariella J., Isani G., Castagnetti C. Activities of matrix metalloproteinase-2 and -9 in amniotic fluid at parturition in mares with normal and high-risk pregnancy. *Theriogenology*, 2021, vol. 172, p. 116-122, doi: 10.1016/j.theriogenology.2021.06.009
61. Lauteri E., Mariella J., Beccati F., Roelfsema E., Castagnetti C., Pepe M., Peric T., Barbato O., Montillo M., Rouge S., Freccero F. Adrenal gland ultrasonographic measurements and plasma hormone concentrations in clinically healthy newborn thoroughbred and standardbred foals. *Animals*, 2021, vol. 11, p. 1832, doi: 10.3390/ani11061832
62. Del Prete C., Lanci A., Cocchia N., Freccero F., Di Maio C., Castagnetti C., Mariella J., Micieli F. Venous blood gas parameters, electrolytes, glucose and lactate concentration in sick neonatal foals: direct venipuncture versus push-pull technique. *Equine Veterinary Journal*, 2021, vol. 53, p. 488-494, doi: 10.1111/evj.13332
63. Lanci A., Ingallinesi M., Morini M., Freccero F., Castagnetti C., Mariella J. Fetal Congenital Diaphragmatic Hernia and Hydramnios in a Quarter Horse Mare. *Veterinary Sciences*, 2021, vol. 8, p. 201-208, doi: 10.3390/vetsci8100201

64. Freccero F., Lanci A., Mariella J., Viciani E., Quercia S., Castagnetti A., Castagnetti C. Changes in the fecal microbiota associated with a broad-spectrum antimicrobial administration in hospitalized neonatal foals with probiotics supplementation. *ANIMALS*, 2021, vol. 11, p. 1-18, doi: 10.3390/ani11082283
65. Del Prete C., Freccero F., Lanci A., Hallowell G.D., Bullone C., Castagnetti C., Pasolini M.P. Transabdominal ultrasonographic measurement of caudal vena cava to aorta derived ratios in clinically healthy neonatal foals. *Veterinary Medicine and Science*, 2021, vol. 00, p. 1-9, doi: 10.1002/vms3.50
66. Sarli G., Castagnetti C., Bianco C., Ballotta G., Tura G., Caporaletti M., Cunto M., Avallone G., Benazzi C., Ostanello F., Zambelli D. Canine Placenta Histological Findings and Microvascular Density: The Histological Basis of a Negative Neonatal Outcome? *Animals* 2021, 11, 1418, <https://doi.org/10.3390/ani11051418>
67. Lanci A., Ingrà L., Dondi F., Tomasello F., Teti G., Mariella J., Falconi M., Castagnetti C. Morphological study of equine amniotic compartment. *Theriogenology*, vol. 177, p. 165-171, doi: 10.1016/j.theriogenology.2021.10.019
68. Lanci A., Benedetti B., Freccero F., Castagnetti C., Mariella J., van Loon J. P. A. M., Padalino B. Development of a Composite Pain Scale in Foals: A Pilot Study. *ANIMALS*, vol. 12, p. 1-19, 2022.
69. Lanci A., Mariella J., Ellero N., Faoro A., Peric T., Prandi A., Freccero F., Castagnetti C. Hair cortisol and DHEA-S in foals and mares as a retrospective picture of feto-maternal relationship under physiological and pathological conditions. *Animals*, 12(10), 2022 <https://dx.doi.org/10.3390/ani12101266>
70. Ellero N., Lanci A., Baldassarro VA., Alastra G., Mariella J., Cescatti M., Giardino L., Castagnetti C. Study on NGF and VEGF during the Equine Perinatal Period—Part 1: Healthy Foals Born from Normal Pregnancy and Parturition. *Veterinary Sciences*, 9(9), 451, 2022 <https://doi.org/10.3390/vetsci9090451>
71. Ellero N., Lanci A., Baldassarro VA., Alastra G., Mariella J., Cescatti M., Castagnetti C., Giardino L. Study on NGF and VEGF during the Equine Perinatal Period—Part 2: Foals Affected by Neonatal Encephalopathy. *Veterinary Sciences*, 9(9), 459, 2022, <https://dx.doi.org/10.3390/vetsci9090459>
72. Lanci A., Perina F., Donadoni A., Castagnetti C., Mariella J. Dystocia in the Standardbred mare: a retrospective study from 2004 to 2020. *Animals*, 12(12), 1486, 2022 <https://dx.doi.org/10.3390/ani12121486>
73. Lanci A., Mariella J., Ellero N., Canisso IF, Dondi F., Castagnetti C. High-Risk Pregnancy Is Associated with Increased Alpha-Fetoprotein Concentrations in the Amniotic Fluid and Foal Plasma. *Journal of Equine Veterinary Science*, 119, 104124, 2022 <https://doi.org/10.1016/j.jevs.2022.104124>
74. Freccero F., Di Maio C., Mariella J., Lanci A., Castagnetti C., Hallowell G. Assessment of the microvascular perfusion using sidestream dark-field imaging in healthy newborn foals. *Veterinary Medicine and Science*, 9(1), 158-166, 2023
75. Lanci A., Merlo B., Grandis A., Mariella J., Castagnetti C., Iacono E. Gross and histological examination of Wharton's Jelly in the equine umbilical cord. *Theriogenology*, 209:184–192, 2023

<https://doi.org/10.1016/j.theriogenology.2023.06.032>

76. Perina F., Mariella J., Ellero N., Freccero F., Castagnetti C., Lanci A. Retrospective analysis of factors associated with umbilical diseases in foals. *Journal of Equine Veterinary Science*, 135, 105045, 2024
77. Lanci A., Perina F., Armani S., Merlo B., Iacono E., Castagnetti C., Mariella J. Could assisted reproductive techniques affect equine fetal membranes and neonatal outcome? *Theriogenology*, 215:125–131, 2024
<https://doi.org/10.1016/j.theriogenology.2023.11.032>
78. Pardié M., Kalpokas I., Freccero F., Castagnetti C., Meikle A. Obesity and gestation in Criollo mares: endocrine and metabolic profiles. *Domestic Animal Endocrinology*, 89, 106857, 2024
<https://doi.org/10.1016/j.domaniend.2024.106857>
79. Monaco D., Castagnetti C., Lanci A., Osman TK., Lacalandra GM, Fusi J. On-field Gross Morphology Evaluation of Dromedary Camel (*Camelus dromedarius*) Fetal Membranes. *Animals* 14, 1553, 2024
<https://doi.org/10.3390/ani14111553>
80. Lanci A., Ellero N., Castagnetti C., Dondi F., Mariella J. Plasma alpha-fetoprotein in neonatal foals affected by prematurity, sepsis and neonatal encephalopathy. *Journal of Equine Veterinary Science* 144, 105231, 2025
<https://doi.org/10.1016/j.jevs.2024.105231>
81. Wilkins P.A., Wong D.M., DRH Working Group on Foal Sepsis Report from the 2024 Dorothy Russell Havemeyer Working Group Meeting on Consensus Definitions for Foal Sepsis. *Equine Veterinary Journal* 1-4, 2025
<https://doi.org/10.1111/evj.14443>
82. Petrucelli M., Sgorbini M., Castagnetti C., Marmorini P., Freccero F. Smartphone-based ECG assessment of heart rhythm at birth in healthy foals born after spontaneous or induced parturition: is there a potential difference? *Veterinary Research Communications* 49(1), 31, 2025

She is coauthor of the book:

Veronesi M.C., Castagnetti C., Taverne M.A.M. (2012) "Neonatologia Veterinaria" pp. 187-328, NAPOLI: Edises, ISBN: 9788879597388.

In 2019 she joined the funded regional project POR-FESR Emilia Romagna 2014-2020 (grant 2018) - Strategic industrial research projects aimed at the priority areas of the Intelligent Specialization Strategy: PG/2018/626605 Health and Wellness Industries: Mat2Rep - Multifunctional biomaterials for tissue and organ self-repair - IRET Foundation, MedReR: Regenerative and Restorative medicine: "Development and testing of therapies and tools for self-repair using electro-medical and medical devices, biomaterials, tissue derivatives, drugs and combinatorial products". Contribution € 799,910.50 (Total cost of the project € 1,117,015).

Teaching activity

The educational activities consisted, since 1999, in assisting students during the clinical training at the Obstetric and Gynecologic Section of the Veterinary Clinical Department and at the Veterinary Teaching Hospital.

She is the teacher of "Veterinary Perinatology" and of the practical training in "Veterinary Perinatology" of the Degree in Veterinary Medicine - V year, from the academic year 2002-2003, at DIMEVET - University Bologna.

During the academic year 2003-2004, she was the teacher of "Pathophysiology of reproduction and artificial insemination II" in the Degree in Veterinary Biotechnology - IV year - at the Faculty of Veterinary Medicine of the University of Bologna.

From 2005 to 2007 she was member of the Committee of the PhD Course in Emergency Veterinary Medicine at the Faculty of Veterinary Medicine (University of Bologna).

During the academic year 2006, she was the teacher of the optional course "Neonatology and management of *peripartum* in horses" in the Degree in Veterinary Medicine - V year - at the Faculty of Veterinary Medicine of the University of Bologna.

From 2008 to 2010, she was member of the Committee of the PhD Course in Veterinary Clinical Science at the Faculty of Veterinary Medicine (University of Bologna).

Since 2011, she is member of the Committee of the PhD Course in Veterinary Sciences at the DIMEVET (University of Bologna).

From 2013 to 2015, she was a member of the Committee of the PhD Course in Veterinary Medical Sciences, Public Health and Animal Welfare of the University of Teramo.

Since 2014, she is a member of the School of Specialization in Equine Medicine and Surgery of the University of Milan.

Since 2021, she is a member of the Committee of the School of Specialization in Physiopathology of Reproduction of the University of Teramo.

Since April 2022, she is the Coordinator of the PhD Course in Veterinary Sciences at the DIMEVET (University of Bologna).

She is the Director of the Postgraduate university course in Equine Perinatology at the DIMEVET (University of Bologna).

She is currently tutor/supervisor of:

- a Researcher (RTDa funded by PON): “Reduction of antibiotic administration in equine sepsis through the application of innovative cell therapies”;
- two Board Eligible Residents of the European College of Animal Reproduction (ECAR), Equine Reproduction;
- a PhD Student with the project: “Clinical and instrumental monitoring of the critically ill equine patient” (from November 2024);
- two Research grants on equine perinatology.

She was the tutor of 5 PhD students which presented the thesis:

- Study on NGF and VEGF during the equine perinatal period (2023 – Nicola Ellero, PhD course in "Veterinary Sciences" at the DIMEVET of the University of Bologna);
- Morphology and microscopy of equine umbilical cord and characterization of Mesenchymal Stem Cells isolated from fetal tissue (2017 – Aliai Lanci, PhD course in "Veterinary Sciences" at the DIMEVET of the University of Bologna);
- The Perinatal Asphyxia Syndrome in newborn foals: diagnostic-therapeutic protocols (2014 – Carlotta Antonelli, PhD course in "Veterinary Sciences" at the Faculty of Veterinary Medicine of the University of Bologna);
- The placental insufficiency in horses (2012 – Alessandro Pirrone, PhD course in “Clinical Veterinary Sciences” at the Faculty of Veterinary Medicine of the University of Bologna);
- Evaluation of blood lactate in critically ill neonatal foals (2008 – Jole Mariella, PhD course in "Emergency Veterinary Medicine " at the Faculty of Veterinary Medicine of the University of Bologna).

She was the tutor of the following research grants:

- Role of trophic factors in sepsis and sepsis-associated organ dysfunction in the adult and neonatal horse (2023, 2024 – University of Bologna);
- Alphafetoprotein as a marker in the high-risk pregnancy of the mare (2020, 2021 – University of Bologna);
- Evaluation of amniotic fluid in the mare with high-risk pregnancy (2019 – University of Bologna);
- Phenotypic and functional evaluation of the cells of the amniotic fluid in the equine species during placental pathologies (2018 – University of Bologna);
- Phenotypic and functional evaluation of the cells of the amniotic fluid in the equine species (2017 – University of Bologna);
- Cytokines in equine colostrum: role in the transfer of passive immunity in healthy and sick neonatal foals (2014 - University of Bologna);
- Parenteral nutrition and lipid metabolism in critically ill neonatal foals (2012 - University of Bologna);
- New markers of inflammation and of congestive heart failure during shock in critically ill neonatal foals (2010 - University of Bologna);

- The circulatory shock in the newborn foal: new diagnostic-therapeutic protocols and prognostic factors (2008 - University of Bologna);
- New prognostic and diagnostic protocols in the treatment of perinatal infections in horses (2007 - University of Bologna);
- Perinatal infections in horses (2006 - University of Bologna);
- Dismaturity in the newborn foal (2004 - University of Bologna).

She was the tutor of many scholarships:

- Equine sepsis (n.2, 2023);
- Management of the Hospitalized horse (n.2, 2021);
- Rotating Internship in equine internal medicine, perinatology and reproduction (2020);
- Equine reproduction (2018);
- Internship in Equine Clinic (2017);
- Equine Internship (2017, funded by Valencia University);
- Equine perinatology (2015, 2017, 2018);
- Haematology of the newborn foal (2011 - scholarship in memory of Prof. Stefano Belluzzi);
- Viral infections in foals (2008 and 2009 - Fondazione Iniziative Zooprofilattiche e Zootecniche, Brescia).

She was the tutor of the following collaboration agreements (cococo and cocopro):

- a 6-month contract and a 9-month contract to support the activities of the Equine Perinatology Unit "Stefano Belluzzi" (2014 and 2015);
- a 1-year contract and a 6-month contract to support the activities of the Equine Perinatology Unit "Stefano Belluzzi" (2013);
- a 2-month contract to support the activities of the Equine Perinatology Unit "Stefano Belluzzi" (2012);
- Viral infections in equine perinatology (2008);
- Management of high-risk pregnancy in the mare: new diagnostic-therapeutic protocols on mares and foals (2007, 2008, Hippogroup);
- Correlation between placental function and IUGR (Intra Uterine Growth Retardation) in horses (2004).

She was the tutor of many ungraduated and graduated students of many Italian Universities.

She is been working in the preparation of degree thesis about Veterinary Perinatology since 2001 with students of Veterinary Medicine of the University of Bologna (n. 59) and with students of the School of Specialization in Equine Medicine and Surgery of the University of Milan (n. 3).

SEMINAR ACTIVITY

AT DIMEVET:

She organized at the Faculty of Veterinary Medicine of Bologna n. 11 Workshops in Equine Perinatology, with internationally renowned speakers (Wendy Vaala, Nicola Holdstock, Kevin Corley, Bettina Dunkel, Stefania Bucca, Igor F. Canisso), participating as a speaker in 2005, 2006, 2007, 2009, 2016, 2019.

In 2019, she organized the first workshop for equine breeders: "From the pregnant mare to the neonate", participating as a speaker.

In 2018, she organized at DIMEVET the "Wet weeks in Equine Perinatology" and participated as speaker with Jonathan E. Palmer (New Bolton Center, PA, USA), Jole Mariella and Francesca Freccero.

In 2015, she organized the first Workshop at DIMEVET in Equine Internal Medicine (speakers Bettina Dunkel and Kati Niinisto).

In 2012, she organized at the Equine Perinatology Unit "Stefano Belluzzi" of the DIMEVET the first "Wet Lab in Equine Perinatology," with Jane Axon (BVSc MACVSc DACVIM CMAVA, Registered Specialist in Equine Medicine, Clovelly Intensive Care Unit - Director, Scone Equine Hospital) and Bill Marmion (BVMS, BSc, MACVSc, FACID, Morphetville Equine Clinic - Chairman).

OUT OF DIMEVET:

She was an invited speaker at the XXIV ABRAVEQ Annual Conference (Campinas, Brasil 4th-6th July 2024): "High risk pregnancy: what can we expect from the foal?", "From biosecurity to antimicrobial stewardship in a perinatology unit", "The best high-risk pregnancy cases of my last 20 years", "The best foal clinical cases of my last 20 years" and 2 round tables.

She was invited as lecturer at the workshop "Equine Fertility and Reproduction", at the University of Messina in July 2019 (other lecturers: Tom A.E. Stout and Marilena Rizzo): "The sick foal: from field to hospital, I part", "The sick foal: from field to hospital, II part", "The foal born from a high-risk pregnancy" and "Foal: clinical cases".

She was invited as lecturer of the webinar at the XXV National Congress of SIVE: "Prognostic factors in the neonatal foal: certainties and surprises", February 2021.

She was invited as lecturer at the SIVE Webinar "From fetus to neonate: a crucial change", November 2020, "Clinical cases".

She was invited as lecturer at the ACME Webinar: "Interactive webinar on equine neonatology clinical cases" and "How to manage at best the perinatal period" April 2020.

She was invited as lecturer at the workshop of the Italian Group of Equine Reproduction of SIVE in January 2016: “Clinical cases in perinatology”.

She was invited as lecturer at the workshop of the Italian Group of Equine Reproduction of SIVE in November 2013: “Management of the orphan foal” and “Assisted nutrition of the sick foal in the field and at the hospital”.

She was invited as main lecturer to the workshop “Use of plasma in equine neonatology” Roma and Milan, January 2012.

She was invited as lecturer with Sarah Stoneham, Paola Gulden and Giovanna Romano to the SIVE “Equine Neonatology Course” Vigone (TO, Italy), March 2008.

She was invited as main lecturer to the workshop “Equine Perinatology” Castellaneta Marina (TA, Italy), February 2008.

She was invited as main lecturer to the “Equine Neonatology Course” of the Faculty of Veterinary Medicine of Bucarest (Romania), December 2007.

Institutional and academic assignments

Since 2019, she is a tutor of the *Collegio Superiore* of the University of Bologna.

From 2018 to 2022, she was the Coordinator of the Student Rotations of DIMEVET.

From 2015 to 2024, she was the Head of the Equine Clinical Service of the Veterinary Teaching Hospital “G. Gentile” of DIMEVET and member of the Management Committee.

From 2015 to 2018, she was the delegate of the Head of the Department for EAEVE.

From 2015 to 2017, she was the Head of Biosecurity of DIMEVET.

From 2008 to 2016, she was a member of the Scientific Committee of the Central Library GB Ercolani of the University of Bologna.

From 2012 to 2014 as a representative of the Associate Professors and from 2015 to 2018 as EAEVE delegate, she was a member of the Board of the DIMEVET and of the Council of the School of Agriculture and Veterinary Medicine, University of Bologna.

In 2013, she was a member of the working group of the DIMEVET for EAEVE reports (SER1).

Membership in scientific committees and editorial

She is a reviewer of: Equine Veterinary Journal, Theriogenology, Equine Veterinary Education, Journal of Veterinary Emergency and Critical Care, Animal Reproduction Science, Reproduction in

Domestic Animals, Animals, Journal of Equine Veterinary Science, Annals of Animal Science, Frontiers.

Other activities

In 2000-2001, 2003-2005, she took part in the National Project of the "Consorzio Bioricerche 2000" on the clinical experimentation and application of the Bioartificial liver in collaboration with the A.O. Cardarelli of Naples, the Istituto Zooprofilattico Sperimentale of Lombardia and Emilia Romagna in Brescia, the Azienda Biotest Italia srl of Naples.

She translated from English into Italian the chapters "Urinary System" and "Reproductive System" of "The Merck Veterinary Manual" published in 2003 (eighth edition).

She is a member of SIVE (Italian Society for Equine Veterinary), SISVet (Italian Society of Veterinary Sciences), SIRA (Italian Society of Animal Reproduction) and ECAR (European College of Animal Reproduction).

She was a member of the Board of SIRE (Italian Society of Equine Reproduction) in 2007-2008.

February 2025