



CARLO NEBBIA

- Full Professor in Veterinary Pharmacology and Toxicology
- **Academic titles** : Doctor in Veterinary Medicine, Specialist in Meat Inspection, Diplomate of the European College of Veterinary Pharmacology and Toxicology (Pharmacology + Toxicology)
- **Teaching duties** :
  - Veterinary Toxicology (School of Veterinary Medicine)
  - Residues Toxicology (School of Veterinary Medicine, School of Specializations)
  - Pharmacology & Toxicology (School of Biotechnology)
- **Main research fields**
  - Identification of biomarkers of illicit treatments in cattle with both traditional and biomolecular techniques (proteomic and genomic approach)
  - Set up of *in vitro* methods to study the metabolic fate of drugs, environmental pollutants, feed additives and growth-promoters
  - Studies on the comparative expression of hepatic and extrahepatic drug metabolizing enzymes in food producing species
  - *In vivo* and *in vitro* studies aimed at investigating the mechanisms of drug interactions
- **Scientific and academic career**
  - 1983 : Researcher in Veterinary Toxicology at the Institute of General Pathology of the Faculty of Veterinary Medicine (Turin)
  - 1985 (March-September) : research fellowship at the Institute of Pharmacology, Toxicology and Pharmacy, School of Veterinary Medicine, Hannover. Studies on the ethylene-bis-ditiocarbamate toxicity in the rat and on the pathogenesis of selenium toxicosis in swine (Supervisor : Prof. Johanna Fink-Gremmels).
  - 1991 : Associate Professor in Residues Toxicology

- 1994 - 1997 : Invited Delegate of the European College of Veterinary Toxicology
- 1996 - present : scientific adviser of the “Servizio di Assistenza Tossicologica Veterinaria”, poison information center managed by S.C.I.V.A.C. (Società Culturale Italiana Veterinari Animali Compagnia).
- 1997 - present : founding diplomate of the European College of Veterinary Pharmacology and Toxicology (ECVPT), Examination Committee member and “de facto specialist” in Veterinary Pharmacology + Toxicology
- 2001 : Full Professor in Veterinary Pharmacology and Toxicology
- 2004 : appointment as ECVPT Vice-President
- 2004 : appointment as Coordinator of the PhD Course in Veterinary Basic Sciences and Biotechnologies
- 2005 : Co-organizer of the 2nd ECPT Workshop in Toxicology with special emphasis on mycotoxins held at the Faculty of Veterinary Medicine of Turin Grugliasco (19-23 September 2005)
- 2006 : Chairman of the 10<sup>th</sup> EAVPT Congress, held by the Faculty of Veterinary Medicine of Turin Grugliasco (17-22 September 2006) and guest editor of the Proceedings appeared on a special issue of the Journal of Veterinary Pharmacology and Therapeutics 29 (1), 1-351, 2006
- 2006 : Start of the scientific collaboration with EFSA

#### Appointments as referee

- 1992 - oggi : editorial board member of the “Journal of Veterinary Pharmacology and Therapeutics”
- 2000 – oggi : Advisory board member of “The Veterinary Journal”
- editorial work for the following scientific journals : Research in Veterinary Science, Life Science, Experimental Gerontology, Veterinary Research, Veterinary Research Communications, Proteomics, Food and Chemical Toxicology

#### Present scientific collaborations

- Dip. di Medicina ed Oncologia Sperimentale, Università di Torino
- Dip. di Scienze Biomediche, Università degli Studi G. d’Annunzio di Chieti e Pescara
- Equipe de Pharmacologie Moleculaire, Laboratoire de Pharmacologie-Toxicologie, I.N.R.A., Toulouse
- Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle d’Aosta
- Regione Piemonte

- Dip. di Sanità Pubblica, Patologia Comparata, Igiene Veterinaria, Università di Padova
- King's College, Nutritional Sciences Research Division, London
- IRCCS Fondazione S. Lucia, Roma
- ISPAAM, CNR, Napoli

### Books and book chapters

- Editor and authors of several chapters of the book C. Nebbia (ed) "Residui di farmaci e contaminanti ambientali nelle produzioni animali" (Residues of drugs and environmental contaminants in animal productions), EDISES, Napoli. 1-658, 2008
- Authors of several chapters of the textbook "Farmacologia Veterinaria" (Veterinary Pharmacology), ed. by S. Carli, P. Ormas. G. Re e G. Soldani, IDELSON-GNOCCHI, 2008

### **LIST OF "PEER REVIEWED" PUBLICATIONS 2004-2008**

1. Nebbia C., Dacasto M., Carletti M. (2004) Postnatal development of hepatic oxidative, hydrolytic and conjugative drug-metabolizing enzymes in female horses. **Life Sci.** 74, 1605-1619.
2. Dacasto M., Eeckhoutte C., Capolongo F., Dupuy J., Carletti M., Nebbia C., Alvinerie M., Galtier P. (2005) Effect of breed and gender on bovine liver cytochrome P450 3A (CYP3A) expression and comparison with other domestic ruminants. **Vet. Res.** 36, 179-190.
3. Stamatii A., Nebbia C., De Angelis I., Giuliano Albo A., Carletti M., Rebecchi C., Zampaglioni F., Dacasto M. (2005) Effects of malachite green (MG) and its major metabolite, leucomalachite green (LMG), in two human cell lines. **Toxicology In Vitro** 19, 853-858.
4. Gusson F, Carletti M, Albo AG, Dacasto M, Nebbia C. (2006) Comparison of hydrolytic and conjugative biotransformation pathways in horse, cattle, pig, broiler chick, rabbit and rat liver subcellular fractions. **Vet Res Commun.** 30(3):271-83.
5. Odore R., Badino P, Pagliasso S., Nebbia C., Cuniberti B., Re G. (2006) Changes in lymphocyte glucocorticoid and beta-adrenergic receptors in veal calves treated with clenbuterol and steroid hormones for growth-promoting purposes. **J. Vet. Pharmacol. Ther.** 29, 91-97.
6. Gardini G., Del Boccio P., Colombatto S., Testore G., Corpillo Di Ilio C., Urbani A., Nebbia C. (2006) Proteomic investigation in the detection of illicit treatment of calves with growth-promoting agents" **Proteomics** 6, 2813-2822, 2006

7. Abbadessa G., Spaccamiglio A., Sartori MI, Nebbia C., Dacasto M., Di Carlo F. Racca S.(2006) The aspirin metabolite, salicylate, inhibits 7,12-dimethylbenz[a]anthracene-DNA adduct formation in breast cancer cells. **Int. J. Oncology** 28, 1131-40.
8. Al Katheeri N.A., Wasfi I.A., Lambert M., Giuliano Albo A., Nebbia C.(2006) In vivo and in vitro metabolism of dexamethasone in the camel. **Vet. J.** 172, 532-543.
9. Bollo E, Guglielmino R, Sant S, Pregel P, Riondato F, Miniscalco B, Cornaglia E, Nebbia C, Dacasto M. (2006) Biochemical, ultrastructural and molecular characterization of the triphenyltin acetate (TPTA)-induced apoptosis in primary cultures of mouse thymocytes. **Cell Biol. Toxicol.** 22(4):275-84.
10. Cantiello M, Carletti M, Cannizzo FT, Nebbia C, Bellino C, Pié S, Oswald IP, Bollo E, Dacasto M. (2007) Effects of an illicit cocktail on serum immunoglobulins, lymphocyte proliferation and cytokine gene expression in the veal calf. **Toxicology** 242(1-3):39-51
11. Carletti M, Cantiello M, Giantin M, Nebbia C, Cannizzo FT, Bollo E, Dacasto M.(2007) Serum antioxidant enzyme activities and oxidative stress parameters as possible biomarkers of exposure in veal calves illegally treated with dexamethasone. **Toxicol. In Vitro** 21(2):277-283.
12. Giantin M, Carletti M, Capolongo F, Pegolo S, Lopparelli RM, Gusson F, Nebbia C, Cantiello M, Martin P, Pineau T, Dacasto M.: Effect of breed upon cytochromes P450 and phase II enzyme expression in cattle liver. **Drug Metab Dispos.** 2008 36(5):885-93.
13. Nebbia C, Della Donna L, Carletti M, Balbo A, Barbarino G, Gardini G. (2008) Use of hepatic protein biomarkers for tracing the exposure of veal calves to illegal growth-promoters: investigations on experimental samples and preliminary application under field conditions. **J Vet Pharmacol Ther.** 31(3):272-5.
14. Cantiello M, Carletti M, Dacasto M, Martin PG, Pineau T, Capolongo F, Gardini G, Nebbia C.(2008) Cytochrome P450 inhibition profile in liver of veal calves administered a combination of 17beta-estradiol, clenbuterol, and dexamethasone for growth-promoting purposes. **Food Chem Toxicol.** 46(8):2849-55.
15. Girolami F, Abbadessa G, Racca S, Spaccamiglio A, Piccione F, Dacasto M, Carletti M, Gardini G, Di Carlo F, Nebbia C. (2008) Time-dependent acetylsalicylic acid effects on liver CYP1A and antioxidant enzymes in a rat model of 7,12-dimethylbenzanthracene (DMBA)-induced mammary carcinogenesis. **Toxicol Lett.** 181(2):87-92.
16. Cantiello M., Giantin M., Carletti M., Lopparelli RM, Capolongo F., Lasserre F., Bollo E., Nebbia C., Martin P.G.P., Pineau T., Dacasto M. Effects of dexamethasone, administered for growth promoting purposes, upon the hepatic cytochrome P450 3A expression in the veal calf. **Biochem Pharmacol** (in press)

