

# Summary

This habilitation thesis reflects the entire professional and research activity carried out after my doctoral thesis (period 1999-2017). This activity is based on scientific and academic achievements on disciplinary or interdisciplinary thematic directions, made in Bucharest at the University of Agronomic Sciences and Veterinary Medicine and Postdoctoral School.

The most significant of my scientific achievements have been published in ISI Thompson journals - indexed (with impact factor). My contribution in the development of several researches that include epidemiological and clinical investigations and treatment of various diseases in animals is noteworthy.

As regards to the research activity, the following directions are relevant:

1. ***Studies about new diagnostic methods and treatments in oncological diseases in animals.***  
During my PhD studies as well as post-doctorate, I have participated in interdisciplinary researches with veterinary experts and scientists as well as with human medicine scientists in order to study how oncological diseases appear, especially concerning the mammary gland in dogs, and finding new and better ways to diagnose and treat them.
2. ***Researches in the field of general surgery.*** This general field of my scientific activity has been objectified by publishing papers as well as by my current activity in the clinic, which has led to worthy results, upon which the said studies and papers have been written.
3. ***Studies in the field of orthopaedic surgery - orthopaedics and hoof management.*** This is a field I have studied since before I got my PhD as well as after I got my degree, studies that have continued successfully until now. The results I have obtained have led to an advanced understanding of the orthopaedic pathology and to a more correct approach of it by other practitioners, for large animals as well as for small animals.
4. ***Researches in the field of veterinary anaesthesiology.*** The scientific contributions in this field are revealed especially by patenting a new method of general anaesthesia in horses, certified by patent number 117893 c1/ 30.09.2002, issued and published on 30.04.2003 / no. 4/2003, as well as by writing in collaboration with other authors a few textbooks and guides of veterinary anaesthesiology.
5. ***Studies in the field of minimally invasive surgery.*** Being a part of interdisciplinary clinical researches led to papers written as study cases in the field of small animal surgery. Knowledge necessary in order to develop this field in veterinary medicine has been obtained by taking part

of *"Basic techniques and laparoscopic cholecystectomy"* at Sf. Ioan Clinical Hospital and it led to scientific papers on this theme, published in several specialised journals, both national and international ones.

6. ***Interdisciplinary studies in the field of veterinary medicine.*** Metabolic monitoring based on metabolic profile tests has been carried out to capture homeostasis deviations from nutritional-metabolic disorders in animals, as well as research into food safety.

After being conferred the title of Doctor of Veterinary Medicine and until now I have elaborated and published over 190 scientific papers, 14 textbooks, along with participation in current professional and clinical activities. Among the monographs I published, I mention *"Large animals orthopaedics"* (2003), a novelty in the field of Veterinary Surgery, which offers new data for the correct surgical approach of large animals. In the same field I edited the monograph *"The hoof"* (2005), which addresses multiple themes such as anatomy, histology and physiology of the hoof, hoof management manoeuvres, as well as veterinary orthopaedic semiology, centralising information and bringing new data in this field.

In 2015 I was a coordinator for writing *"Horse pathology and clinic textbook"*, a textbook that encompasses extensive knowledge of horse medicine in several areas of veterinary medicine.

After supporting my PhD thesis I published 9 ISI published and indexed articles; 47 papers published in magazines indexed in BDI and 63 participations at national and international symposiums. Professional recognition is also represented by the number of citations.

During the post-doctoral period I was a project director within a project of the Romanian Academy, which had as objective *"Postdoctoral research on the eco-bioeconomic impact of minimally invasive surgical manoeuvres in animals used as experimental models in comparative medicine"*, during 2014 -2015.

On the interdisciplinary direction I won a project Partnership in Priority Areas at the national competition -PN II - Programme 4: *"Elaboration and implementation of a new algorithm, diagnostic and the malignant pathology of the reproductive tract and mammary gland, based on correlating clinical and paraclinical factors with genetic and epigenetic markers"*: Research project 62-086, in which I was responsible for the theme along with the team at CF 2 Clinical Hospital.

I am a scientific referee at national and prestigious magazines and a member of the editorial board of the Romanian Magazine of Veterinary Medicine since 2015. I am a member of the editorial board of Scientific Works C Series Veterinary Medicine since 2015 and a member of the editorial board of the magazine Veterinary Practice since 2013. In the last chapter of this thesis are presented academic and scientific prospects for development, evolution plans and career perspectives.