## HABILITATION THESIS SUMMARY

## MATERNAL FETAL MEDICINE BETWEEN FUNDAMENTAL RESEARCH AND REPRODUCTIVE HEALTH OF WOMEN

**Domain: Medicine** 

**Author: Prof. Dr. Moga Marius** 

University Transilvania of Braşov

The habilitation thesis "Maternal Fetal Medicine between fundamental research and reproductive health of women" includes three sections according to the CNATDCU recommendations and the provisions of art. 300 par. (2) of the National Education Law no. 1/2011 and represents a summary of the scientific, professional and academic activities that I carried out during the post-doctoral phase (Doctoral thesis "Osteoporosis in natural and induced menopause" under the coordination of Prof. Vasile Luca, PhD, supported by the University of Medicine and Pharmacy Carol Davila Bucharest in 2004).

The first section of this thesis includes the main results of the professional, academic and research activities, closely related to the level of knowledge in the field, including the chronological stages of my career, together with the most important publications, research grants obtained through competition, published scientific articles or scientific achievements.

Chapter I systematically presents the main results of the scientific research, presenting a summary of review papers and original studies based on integrative medicine, personal researches published in prestigious journals with impact factor. In recent years, I have been particularly interested in how natural compounds could improve the symptoms of certain pathologies, how can be used those compounds for prophylactic purposes, both in benign and malignant pathologies. This chapter discusses a conceptual approach between overlapping and potential synergies of integrative medicine and preventive medicine, being a direction of development of medicine in the present era.

The main personal research in maternal-fetal medicine, a field that has been a constant concern throughout my career is also summarized in this chapter. The topics discussed are: the history of maternal-fetal medicine, the current context of natality in Romania and in the region of Brasov, the environmental factors involved in the development of fetal abnormalities, the screening and diagnosis of fetal abnormalities, the own or induced maternal pathology and the impact on the pregnancy and reproductive health. Thus, under the topic of maternal-fetal

medicine I described in this chapter original data and review papers, published in various journals.

The second chapter of this section shows the professional development, the doctoral and postdoctoral activity, which allowed me to obtain the results underlying this thesis.

The activity I have carried out so far at Faculty of Medicine from Transilvania University of Brasov, as a teacher, harmoniously fits in the mission and objectives of the University, both in didactic and scientific terms. I am a University Professor in the Department of Medical and Surgical Specialties of the Faculty of Medicine, Transilvania University of Brasov, PhD in Medicine, coordinator of the Discipline of Obstetrics and Gynecology. Since 2012, I am the Dean of the Faculty of Medicine. I undertake my clinical activity as the Head of Obstetrics and Gynecology Clinic Department at the Clinic Hospital of Obstetrics and Gynecology "Dr. I.A. Sbârcea" Brasov. The Obstetrics and Gynecology Clinic Department that I run for includes the maternal-fetal medicine division.

I am a member of various Scientific Societies, elected member in the County Council of the College of Physicians Brasov and the chairman of the Ethics Council of the Obstetrics and Gynecology Clinic Hospital of Braşov.

Regarding the relevance and impact of scientific results, the research topics undertaken are in several directions and are reflected in the published books and articles, proving the ability to synthesize, to conform to the scientific concept, as well as the scientific level. I wrote 3 books as first author and 15 books / chapters in books / collections, in collaboration, as co-author. I published a total of 29 articles as principal author or collaborating with other researchers in ISI-rated scientific journals with impact factor and over 40 articles in listed BDI scientific journals. I presented an important number of papers at symposiums, national conferences with International participation and international scientific events. I organized national and international scientific events as well as Continuing Medical Education courses.

I have carried out the research activity with several scientific projects won by national and international competitions. I have proved the ability to lead projects by successfully coordinating 4 national or international research and development contracts in which I have been the coordinator / project manager. In addition, the management and organization capacity is supported by winning through competition access (ANCS) other 3 national projects, for organizing / financing scientific events, in which I was the project manager. I was a member of the team in 14 projects, demonstrating my teamwork ability and the efficiency of my scientific collaborations. These features are also indicated by the big number of published articles in international journals in collaboration with leading brand specialists in the country and on abroad. It is valuable to mention the experience of collaborating with top international specialists in large-scale research and development projects at European level, such as FP7 Plant Food Supplements: Levels of Intake, Benefit and Risk Assessment (PLANTLIBRA), together with the full coordination of a European Academic Network - Central European Exchange Programme for University Studies (CEEPUS).

The professional accumulated experience in institutions other than the institution I work for, has contributed to my special development both in terms of teaching and research: the Erasmus or CEEPUS teaching internships in Spain, Greece, Poland, Bulgaria, Moldova, Turkey, Croatia, experience exchange at the Babraham Institute of Genetics and Epigenetics in Cambridge, UK, 2010, minimally invasive surgery training courses in Guilford, UK in 2014 and Louvain, Belgium in 2015.

The second section is dedicated to the academic career development and scientific research directions, based both on my scientific experience and on the medical experience, accumulated in a leading field that is Obstetrics and Gynecology. The fields of research that I have been involved in so far, maternal-fetal medicine, epigenetic and gyneco-endocrinology, gynecological oncology pathology will continue to be a priority.

The development plan of my career follows two main directions: academic and scientific activity, in order to permanently improve them to achieve the most reliable results. The professional and scientific achievements will allow me both the coordination of the future generations of students and resident doctors and also the selection and training of new PhD students at a quality adapted to the requirements of a modern university, in parallel with the development of scientific research. PhD students will represent a major option to increase the scientific visibility by disseminating research results (Thomson Reuters indexed articles) and by constantly stimulation to participate at national and international scientific events.

**The third section** contains references used to integrate the research activities described in previous sections.