

Improving the women's quality of life by applying minimally invasive methods of diagnosis and treatment in obstetrics and gynecology

Summary of the habilitation thesis

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My research activity started as a student with the elaboration of scientific papers and their presentation at medical congresses. Also during that period, I learned the concepts for creating BDI-type articles that were published from the first year of residency. My medical dissertation had an innovative and original character, being performed using the cardiac impedance technique in hypertensive patients. Some of these results allowed me to obtain prizes at national congresses. The doctoral thesis entitled "Noninvasive methods for the evaluation of hemodynamics in pregnant women" followed the natural route of research using the cardiac impedance technique, this time applied to pregnant women. The doctorate was followed by further research on this topic and the publication of articles in the field.

My research activity is highlighted by coauthoring 83 ISI Web of Science indexed publications, 48 BDI indexed articles, 42 ISI indexed abstract papers, 185 miscellaneous papers or scientific contributions. I am also the co-author of 19 book chapters in the field and I received 16 awards for scientific papers at international congresses and a Hirsch index of 10.

The research activity was also supported by the participation as a member in the team of some research projects. "Integrated counseling methodology, unitary reporting and risk management in the prenatal diagnosis of fetal congenital anomalies".

Until now, the top of the research projects was represented by the title of responsible research grant "Carol Davila" won through competition 5781/08.03.2018, with a research grant - 9000 euros held in Germany, Homburg, Saarland University, June-November 2018. During this research internship in the Obstetrics-Gynecology Clinic in Homburg, I had the opportunity to improve and learn methods and the publication of scientific articles, as well as gaining experience in minimally invasive surgery techniques. In collaboration with members of the German clinic, we published articles in the field of endometriosis and gynecology. In the long term, I want to maintain this activity and obtain new projects as well as innovative articles.

The desire to collaborate with medical institutions abroad was not only realized through the internship in Taiwan in 2009 and the one in Germany in 2018, but also through the presentation of papers at international congresses and articles in prestigious journals. I also believe that the updating of scientific knowledge is done through access to recent information, which is why I became a member of some national and international professional scientific societies.

Treatment by minimally invasive methods remains a desire in my professional and research career. In this context, in recent years I have been working on my own research project, which was realized by making an invention and obtaining two patents in 2023.

Learning and teaching others have been the objectives of my 10-year activity at UMF "Carol Davila" Bucharest. I started my university career 10 years ago as an associate university assistant in the Physiology 1 discipline of the Clinical Department 2. This activity represented a continuous course, natural after completing the medical dissertation "Peculiarities of hemodynamics in hypertensive patients" in 2011. Later, in 2012, I became a doctoral student in the same clinic and completed the doctoral thesis "Noninvasive methods for the evaluation of hemodynamics in pregnant women", which I finished in 2015. The teaching experience accumulated as a university assistant for a determined period started in 2014, as well as the completion of the doctoral training allowed me to obtain in October 2016 the position of university assistant for an indefinite period at the "Bucur" Obstetrics-Gynecology clinic. In October 2020 I became Lecturer in the "Bucur" Obstetrics-Gynecology clinic and in October 2024 I was promoted to the position of Associate Professor in the same clinic of UMF "Carol Davila" Bucharest.

As a teacher, I supported numerous practical works for the students of the "Carol Davila" Faculty of Medicine in Bucharest, in the Obstetrics-Gynecology specialty, and in the field of physiology.

Also for didactic educational purposes, I participated in the publication of monographs, treatises and manuals for students and specialists. An important component of the didactic and teaching activity is the process of evaluating the knowledge and skills acquired by students or trainees, and in this sense I have participated as a member in the commissions for admission to medicine, license exams or resident secretary in the commissions for different promotion exams. I also participated in the guidance and completion of 67 medical theses.

The general objectives for my research activity are:

1. Supporting PhD students in successfully completing their PhD thesis, articles and personal research.

2. Dissemination of research results in BDI, ISI indexed journals and within national and international conferences and congresses.

3. Realization of new research projects based on specific research objectives

4. Participation and coordination of books, monographs and specialized manuals.

Specific objectives:

General objective of the medical activity: promoting the quality of the medical act in the Obstetrics-Gynecology specialty and the dignity of the medical profession.

For this I intend to continue the improvement activity with new courses and skills that will expand and develop the capabilities I have acquired so far.

The development of protocols and updated practice guidelines in which I participate in my capacity as a member of the Society of Obstetrics and Gynecology in Romania

Developing procedures for risk management in obstetrics and gynecology, the currently undervalued activity.

I also intend to develop relations with other medical and humanistic disciplines in order to regain the medical activity of its humanistic, socially integrated dimension and to overcome the level of "doctor technician"

My actual performances in minimally invasive methods such as laparoscopy, hysteroscopy, ultrasound, cardiac impedance will contribute to a prompt diagnosis with a positive impact on the quality of life of patients.

In conclusion, I consider that all these objectives that I propose to achieve are in a natural continuum of my university career and that they will judiciously and constructively intertwine the three essential principles of a high standard medical education with didactic, medical and research sides.