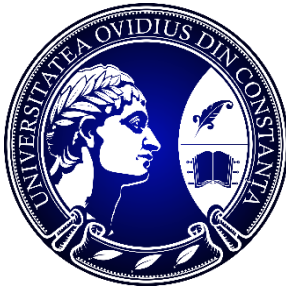


“OVIDIUS” UNIVERSITY OF CONSTANȚA



DOMAIN OF RESEARCH: MEDICINE

**ABSTRACT OF THE
HABILITATION THESIS**

**„INTEGRATED THERAPEUTIC-
INTERVENTIONAL MODEL IN DEGENERATIVE
LUMBAR PAIN SYNDROMES”**

CANDIDATE,

Assoc. Prof. dr. Mădălina Gabriela ILIESCU

2022

ABSTRACT OF HABILITATION THESIS

Except for the habilitation thesis summary, introduction, conclusions and bibliography, the habilitation thesis is structured in 2 sections, each containing several chapters.

Thus, **Section I:** Professional, academic and scientific achievements is structured in six main chapters: **Chapter 1.** Professional activity with subchapters: Professional path: professional degrees, internships and professional training courses, certificates obtained; Professional experience; Recognition of professional activity, awards and distinctions. **Chapter 2.** Academic activity with subchapters: The course of the academic activity and the main didactic responsibilities; Coordination of undergraduate theses; Participation in projects, grants and clinical trials; Completed competition projects / grants; Clinical trials - principal investigator; Professional development and international recognition; Management and leadership experience. **Chapter 3.** Scientific activity, general notions with subchapters: Journalistic activity-summary of articles published in prestigious journals indexed in international databases; and Doctoral research, the beginning of the research activity. **Chapters 4, 5 and 6** address Research Outcomes - the main areas of research.

Section II, Professional and Academic and Scientific Career Development and Development Plan, also includes 3 chapters as follows: **Chapter 1.** Ability to coordinate research teams, organize and manage teaching and research activities; **Chapter 2.** The professional-didactic career development plan; and **Chapter 3.,** in which I outlined the main plans for professional, academic, and research development that I propose for the future.

The first section of the habilitation thesis is a synopsis of all my pre- and postdoctoral professional, research and academic performances. In 2004 I completed a master's degree in "Gastroenterology and Hepatology", and in 2010 I completed my doctoral thesis on "Anatomical-clinical-imaging aspects in low back pain due to mechanical causes" started in 2005, under the coordination of Prof. Univ. Dr. Petru Bordei thus became a doctor of Medicine in 2011. Also in 2011 I became a primary care physician in Recovery, Physical Medicine and Balneology, and in 2014 I resumed my master's studies, this time in the master's degree "Management of institutions and medical and pharmaceutical services "at the Faculty of Medicine," Ovidius "University of Constanța. In order to continuously improve and update the knowledge to the highest standards, I

participated in 120 scientific events (scientific sessions, conferences, national and international medical congresses) and I attended 22 specialized training courses. I went through all the classic stages of my career from university preparator in 2002, assistant professor in 2005, lecturer in 2011, to associate professor in 2021.

Throughout my teaching career, I have constantly tried to involve and guide students and residents in the complex act of knowledge, and at the same time, I guided them in the process of translating the knowledge acquired in research into quality scientific materials. I was a scientific guide or coordinator for over 70 dissertations to complete bachelor's or master's degrees. In 2019, I became, after 8 years in which I was a mentor, coordinator of training in residency in the Specialty of Physical and Rehabilitation Medicine. Coordinating young students or residents in current medical practice, but also increasing their interest in research, have become priorities of my teaching activity. I have participated as a lecturer or speaker in prestigious national and international events and I have been appointed a member of numerous examination commissions for positions in higher medical education or in specialized health units. The publishing activity represented a continuous preoccupation within the academic activity, thus trying to promote the image of the Faculty of Medicine from Constanța on a national and international level. The synthesis of the academic activity carried out during the academic career is represented by numerous articles published in extenso in indexed journals ISI Web of Science / Clarivate Analytics, ISI Proceedings or other journals indexed in international databases (BDI) - *Hirsch index 8 in Web of Science, 6 in Google Scholar and 3 in Scopus*, as well as numerous communications within conferences / congresses / specialized workshops published in volumes of abstracts with ISBN, as well as 9 books or book chapters / monographs published by prestigious publishing houses. The recognition of academic, research and journalistic activity is found in international indexing bases that certify the fulfillment of the minimum and obligatory standards of the Ministry of Education and Scientific Research for conferring the Qualification title, as well as in awards, distinctions and diplomas of excellence. I have been a reviewer for articles published in ISI Journals with FI, such as: Applied Sciences, Special Issue Advanced Technologies for Assessment and Therapy in Rehabilitation Medicine (ISI with IF 2,679), International Journal of Environmental Research and Public Health, Special Issue Exercise and Cardiovascular Risk Factors, (ISI with IF 3,390), Journal of Clinical Medicine (ISI with IF 4,242), International Journal of Environmental Research and Public Health, Special Issue Neuromuscular Performance and

Wellness in Sport: Assessment, Training, Gender and Technology (ISI with IF 3,390). I am a member of the editorial board for Techirghiol Journal, a quarterly publication with ISBN, and also, I am member in editorial Board of Balneo and PRM Recherche Journal, ISI indexed.

Throughout my professional career, I have become a member of 7 national and international specialized professional societies, and in the research activity, I have participated so far in 16 research, innovation and institutional development projects. The degenerative pathology of the lumbar spine and the studies on the therapy with natural factors in medical rehabilitation were the main research engine, and the activity within the Researcher Nucleus of the Techirghiol Spa and Rehabilitation Sanatorium contributed a lot to my achievements. The approach of the subjects was complex, from the exploration with the help of fundamental sciences, to methods of clinical exploration, imaging and, last but not least, screening and innovative therapies, studies related to quality of life, multidisciplinary, etc.

In next section I outline the main plans for professional, academic, and research development that I propose for the future. The lines of professional development are constantly updated to the latest knowledge in the medical field in which I work, by learning new skills and abilities in the field, updating the knowledge related to innovative medical therapies in the field. Evolving in the spirit of knowledge, having the chance of a favorable climate for research since I was a doctoral student, having valuable mentors in my professional and academic activity, who decisively influenced my steps on the chosen complex path, research was the pillar of my professional and academic evolution.

The main research directions proposed for the future are represented by: "Increasing the quality of life using therapy with intermittent hyper and hypoxia in patients with post-Covid respiratory dysfunction"; "Monitoring of serum hydroxy-vitamin D values after contrasting peloidotherapy in patients with osteoporosis in rehabilitation treatment"; "Complex histological study of skin changes in psoriasis vulgaris after Techirghiol peloidotherapy treatment"; "Effective therapeutic management of the elderly patient with low back pain".

The academic activity will be dominated by the permanent updating of teaching materials, by the modeling and permanent adaptation of the teaching support. I will actively involve students and residents in the complex process of learning by participating in scientific events on specialized or interdisciplinary topics and I will continue to coordinate students in order to complete the practical part of the bachelor's thesis. I will encourage young PhD students to

access funds for basic medical research / scholarships and funding sources for young researchers and will ensure a continuous annual publishing activity, through publications in ISI and BDI indexed journals, to increase the visibility and reputation of the faculty in the academic world.

Conclusions. For the sake of professional and academic perfection, I have always guided my steps with openness to research and knowledge, to transparency and adaptability, to collegial and team spirit, with dedication and sometimes even personal sacrifice. Through the content of the habilitation thesis carried out and drafted according to the legal reglementation of the Ministry of Education and Scientific Research and of the Regulation of Ovidius University, regarding the drafting, organization and development of the process of obtaining the Certificate of Habilitation, I tried to bring relevant arguments in favor of my acceptance as a coordinator authorized for PhD research.