UNIVERSITY OF MEDICINE AND PHARMACY "CAROL DAVILA" BUCHAREST, ROMANIA DOCTORAL SCHOOL DOMAIN OF STUDY MEDICINE

MINIMALLY INVASIVE DIAGNOSIS AND TREATMENT IN MULTIDISCIPLINARY MANAGEMENT OF THORACIC ONCOLOGY

- ABSTRACT OF HABILITATION THESIS -

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Abstract

The designated purpose of the habilitation thesis is to present and demonstrate the quality of work performed in my professional activity, and also to offer a starting point for the next stage of my academic career, that of guiding doctoral research and thesis elaboration.

Condensing in 100 pages the professional accomplishments proved to be an extremely challenging task; furthermore, this abstract is meant to synthesize the logically structured habilitation thesis.

Chapter 1 presents the **scientific activity** and it is structured into four subchapters:

The research domain presents the context of scientific and clinical activity, namely the **thoracic surgery and bronchoscopy practice** in the Institute of Oncology "Prof.Dr.Al.Trestioreanu" Bucharest, where our Clinic of Thoracic Surgery is developing since 2009. The role of research in this context led to the elaboration of the doctoral thesis – the first thesis on radically resected lung cancer with the oncologic outcome for the 326 patents included. The professional activity performed afterward continues the same clinical and didactic direction, lung cancer being the main pathology in our daily professional activity.

The struggle for progress is presented with honesty – the introduction and development of the **minimally invasive thoracic surgery** – **VATS** (**Video-Assisted Thoracic Surgery**) – in the Thoracic Surgery Clinic from the Institute of Oncology "Prof.Dr.Al.Trestioreanu" Bucharest. **Promoting VATS** in our clinic was a successful summation of personal effort, professional teamwork, and managerial implication for sustaining and developing the minimally invasive thoracic surgery practice.

The research themes are presented, all being related to the oncological activity:

- lung cancer diagnosis and treatment for personalized management,
- lung metastases surgical approach as part of multimodality treatment,
- pericardium surgical management in oncological patients (drainage, resection),
- pneumonectomy for malignancy and post-pneumonectomy oncological outcomes,
- COVID effects on surgical practice,
- diaphragmatic surgical pathology,
- esophageal pathology surgical aspects,
- MITS (Minimally Invasive Thoracic Surgery):

- VATS (Video-Assisted Thoracic Surgery),
- RATS (Robotic-Assisted Thoracic Surgery),
- bronchoscopic diagnosis and treatment,
- liquid biopsy in lung cancer diagnostic.

The results of scientific activity and research are summarised - books and book chapters; scientific articles published in indexed journals – professional items are grouped in the main themes presented above.

The main elements of scientific and research activity recognition are briefly presented.

Chapter 2 is dedicated to academic activity and synthesizes the main didactic responsibilities, followed by the managerial and administrative activities performed and developed.

Chapter 3 summarises the professional activity – stages and courses of professional development followed to accomplish constant upgrades in medical information and access innovation, the certificates obtained after following the designated formation courses, participation in examination boards, and the main elements of professional activity recognition.

Chapter 4 describes the proposed **plan for the academic career's evolution and development**. As an introduction, a short description of the definition and role of the faculty in medical studies, especially in surgical specialties. The self-evaluation is the next subchapter and contains the academic and professional evolution and accomplishments to date. The guiding principles followed in developing the academic career are then presented, together with the working instruments and the resources available.

The conclusions successfully summarise this habilitation thesis, presenting the professional, individual, didactic, and research mission assumed.

The permanent development and update of didactic and research activity, the practical manner of teaching, the presentation of a modern didactic plan, and the sustained research activity are priority domains. These will lead to augmentation of the prestige of the Thoracic Surgery Clinic from the Institute of Oncology "Prof.Dr.Al.Trestioreanu" Bucharest, will augment the national and international recognition of the University of Medicine and Pharmacy "Carol Davila" Bucharest, Romania and, not to be neglected, will open new financing resources for academic activity.

The bibliography contains a restricted number of references, representing strictly the most significant ones for the work presented in the four chapters.

All the images presented in the habilitation thesis are direct presentations of my work performed in everyday practice as individual and teamwork - clinical activity in thoracic surgery (both open and minimally invasive VATS approach) and bronchoscopy (diagnostic and interventional rigid bronchoscopy), didactic and research activity.

It is a moral duty towards my teachers and predecessors to accomplish the proposed professional goals. It is an honor for me to further transmit and develop medical knowledge.

I consider myself ready to push forward the scientific and didactic boundaries of thoracic surgery and oncology and to continue developing myself and my team, while teaching my younger colleagues to achieve the best of themselves while conducting their doctoral research and guiding their doctoral thesis elaboration.

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