

**"CAROL DAVILA" UNIVERSITY OF MEDICINE AND PHARMACY,  
BUCHAREST  
DOCTORAL SCHOOL  
GENERALE MEDICINE DOMAIN**

**THE VALENCES OF INTERDISCIPLINARY MEDICINE  
FROM FUNDAMENTAL SCIENCES TO  
CLINICAL INTEGRATION**

**CANDIDAT:**

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## SYNOPSIS

The habilitation thesis titled: "THE VALENCES OF INTERDISCIPLINARY MEDICINE FROM FUNDAMENTAL SCIENCES TO CLINICAL INTEGRATION" presents my entire scientific, academic, and professional activity, as well as perspectives on academic career development. The thesis is divided into four main chapters and outlines my evolution since the beginning of my academic career (2007) and admission to the doctoral program (2008), respectively.

In Chapter 1 of the habilitation thesis are presented my current achievements in terms of scientific and academic activity, according to various stages in personal development. The scientific activity conducted from the beginning of my university career to the present has primarily focused on interdisciplinary medicine, with physiology as the cornerstone supporting clinical specialties. The studies published from the outset have had a multidisciplinary character, which is indeed an essential aspect in the quality of medical and research activities.

The doctoral thesis titled: „ The nephroprotective treatment of arterial hypertension in the elderly” has addressed an interdisciplinary area of interest and a significant public health issue both historically and presently. With the increase in life expectancy, there has been a corresponding rise in arterial hypertension within this demographic, leading to an escalation in renal adverse events associated with hypertension therapy.

The primary objective of the doctoral research study was to characterize the elderly hypertensive population in terms of specific clinical and biological features, while establishing an appropriate treatment algorithm. Another significant objective was to characterize general comorbidities and kidney involvement through monitoring of antihypertensive treatment, with a primary focus on nephroprotection. The main purpose was to delineate this condition as an interdisciplinary concern, which could benefit from varied expertise: general practitioners, cardiologists and nephrologists.

My doctoral research consists of a prospective open-label multicenter clinical study, conducted between September 2008 and September 2010, on a considerable number of patients with arterial hypertension aged over 65 years, and an experimental study on elderly Wistar rats, divided into two groups, one with normal blood pressure and the other with experimentally induced renovascular hypertension, carried out at the University of Medicine and Pharmacy Carol Davila, Bucharest.

The conclusions drawn from the doctoral research have resulted in a nephroprotective treatment guideline for arterial hypertension in the elderly. The findings of the thesis have been published in prestigious medical journals and presented to key national congresses.

Over the following years, I engaged in multiple projects, managing to sustain my practical, research, and academic activities concurrently. I had the opportunity for multidirectional development by collaborating with physicians from various medical specialties during my doctoral research, including the nephrology department of „Sf. Ioan” Clinical Emergency Hospital, general medicine at the Center for Assistance to Persons with Disabilities, and psychiatry and psychology while serving as the medical director of Titan Psychiatric Hospital „Dr. Constantin Gorgos”. After my doctoral research, I collaborated with departments of internal medicine, surgery, oncology, hematology, and cardiology during my tenure at Coltea Clinical Hospital. Therefore, over a period of several years, I participated in numerous studies and research projects within the Physiology department, as well as other medical specialties. This accumulation of information provided me with the opportunity to adopt a holistic approach to patient care and their medical issues. These endeavors were carried out gradually and illustrate a significant portion of my scientific research activity.

Chapter 1 also encompasses research papers, including monographs and medical treatises, where I served as the primary author, co-author, or coordinator. These papers were published in both CNCSIS national journals and international journals. Over the years, they have been well-received by students, residents, and physicians from various specialties, thereby contributing to professional development. Thus, interdisciplinarity and collaboration stand as pivotal drivers of progress in medicine. The culmination of my doctoral research has resulted in multiple awards, which I accepted alongside my colleagues. They are presented at the end of the chapter.

In Chapter 2 of the habilitation thesis, my academic endeavors are delineated, encompassing a spectrum of teaching materials, ranging from graduation thesis and students scientific communications to examination procedures during admissions, graduation or promotion, as well as managerial and administrative responsibilities.

Chapter 3 of the habilitation thesis starts with an overview of my professional journey, starting from the graduation from Medical School, entry into a residency program and my successful completion of the assistant professorship competition. Driven by a passion for this profession and a desire to lay the groundwork for medical knowledge through the study of a fundamental science that underpins the understanding of all pathologies – Physiology - I have advanced to the position of associate professor and head of the

Physiology I Discipline at the Faculty of Medicine. Additionally, this chapter highlights my participation in recruitment committees for positions within the medical network, as well as elements of professional recognition.

The final chapter of the habilitation thesis highlights my career development plans, focusing on two major directions: the educational plan and the scientific research plan. These plans will be reflected in objectives that I will pursue in my teaching activities, aligning with both national and European academic programs. The aim is to enhance the quality of educational services and study programs and ensure optimal material resources for delivering high-quality education.

Encouraging interdisciplinary research by fostering collaboration among departments and disciplines for research topics and establishing research teams to ensure a holistic and innovative perspective are the main proposals for the future development of my activities in the field of medical research