

SUMMARY

of the habilitation thesis entitled:

CHRONIC RESPIRATORY PATHOLOGY – FROM CLINICAL RESEARCH TO PULMONARY PRACTICE

Candidate: Associate Professor Claudia-Lucia TOMA

I began my residency in Pneumology in 1996, completing my training at the "Marius Nasta" Institute of Pneumology. In 2000, I passed the Medical Specialist examination, and in 2005, I achieved the Senior Medical Certification in Pneumology.

In 2000, I successfully competed for the position of University Assistant in the Pneumology Department at UMF "Carol Davila." In 2003, I advanced to Assistant Professor, in 2013 to Lecturer, and in 2017 to Associate Professor in the same department. During this time, my academic activities included practical training sessions in pneumology for Romanian-speaking students, and beginning in 2011, also for English-speaking students. As an Assistant Professor and later as a Lecturer and Associate Professor, I developed and taught courses on extrapulmonary tuberculosis, lung cancer, interstitial lung diseases, and COPD in both Romanian and English, based on departmental needs.

During this period, I supervised over 20 thesis projects for UMF "Carol Davila" students in both Romanian and English, many of which were well-received by thesis committees.

Beyond teaching, I have also been active in clinical research, participating in numerous international, multicentric clinical trials. I have been involved as principal investigator in 25 clinical studies and as co-investigator or coordinator in 19 international clinical trials assessing new molecules or combinations for treating pulmonary diseases (asthma, COPD, pulmonary hypertension, pneumonia).

Since 2008, I have been part of the team managing the National Pulmonary Hypertension Program at the "Marius Nasta" Institute, which has continuously expanded, currently monitoring and treating over 70 patients with various forms and severities of pulmonary hypertension. In 2012, I completed a Master's Program in Pulmonary Vascular Pathology at the University of Bologna, Italy, coordinated by Professor Nazzareno Galié.

My professional training has been ongoing, involving numerous national and international courses covering asthma, COPD, interstitial lung disease, rare pulmonary diseases, pulmonary hypertension, and tuberculosis. Since 2014, I have worked with colleagues to establish a Regional Monitoring Center for Lung Transplant Patients. In this context, I attended in-depth lung transplant courses organized by the European Respiratory Society and two training placements at prominent European lung transplant centers (Vienna, Austria, and Leuven, Belgium). For almost 20 years, the Pneumology Department 4 at "Marius Nasta" Institute has monitored about 15 patients who have undergone lung transplants.

My publications include 19 ISI-indexed articles (12 as lead author and 7 as co-author), 32 articles in national B-category journals (17 as lead author), and 77 abstracts in ISI-indexed journals and 51 in ISSN/ISBN-indexed journals. My current Hirsch Index is 7.

My professional affiliations include the Romanian Society of Pneumology, European Respiratory Society, and American Thoracic Society.

Given my activities in the Pneumology Department I at UMF Carol Davila, my **academic development plan** includes:

1. Implementing a tailored curriculum for students, residents, and young specialists, integrating theoretical knowledge, case studies, and practical activities.
2. Enhancing pedagogical and mentorship skills.
3. Increasing research contributions, promoting innovation, and fostering interdisciplinary and international collaborations.

Educational Development for Students and Residents:

1. **Students:** Creating a comprehensive pneumology curriculum, promoting active learning, and organizing practical workshops (radiologic interpretation, spirometry, bronchoscopy).
2. **Residents:** Establishing a mentoring system for clinical and research guidance, continuous training in modern diagnostic and therapeutic techniques, and support for publication activities.

Support for Young Specialists: Organizing continuing education programs, encouraging interdisciplinary and international collaborations, and developing leadership and mentoring skills.

Increasing expertise in pulmonary hypertension, advocating for the implementation of a National Pulmonary Hypertension Registry to improve patient access to diagnostics, specific vasodilator therapy, and long-term monitoring. Attending the annual European Respiratory Society sessions and every five years with the International Task Force to update the International Guidelines on pulmonary hypertension diagnosis and treatment is a key objective.

Another ambitious goal is to achieve recognition of the "Marius Nasta" Institute as a center of excellence in interstitial lung disease and rare pulmonary diseases and to create a lung transplant center. My work includes attending national and international conferences, ongoing updates through specialist publications, and strengthening management skills.

Research and Publication Plan: Short-term objectives include identifying relevant research areas (e.g., biological therapies, interstitial lung disease, rare diseases), developing clinical study projects, and securing research funding. Medium- and long-term goals include publishing results in international journals, participating in conferences, and forming an interdisciplinary research team for advanced pneumology studies.

Continuing Medical Education (CME) Programs:

- For residents and other specialists (pneumologists, internal medicine doctors, general practitioners) by organizing interactive clinical symposiums and workshops with the latest advancements and exceptional clinical cases in pneumology.
- Continuation of the Pulmonary Hypertension Courses, part of the National Pulmonary Hypertension Program, aimed at pneumology, cardiology, rheumatology, and internal medicine specialists across Romania.
- Guiding and encouraging pulmonology residents to collect scientific data, analyze it, and draft scientific articles for renowned national and international journals or to present findings at various national and international congresses.
- Developing a new Pneumology Book, involving prominent pulmonologists nationwide as authors.

Activities in the Romanian Society of Pneumology:

- Organizing national congresses, conferences, and symposiums;

- Informing doctors and patients about the prevention, diagnosis, and treatment of prevalent chronic respiratory diseases (smoking cessation programs, tuberculosis prevention and treatment);
- Recognizing international asthma and COPD days through national public awareness campaigns on the prevalence and burden of chronic obstructive respiratory diseases;
- Organizing nationwide courses of interest for residents and young specialists, such as: Applied Radiology (classical and high-resolution CT) in Pneumology and Inhalation Therapy Courses, covering the latest devices and molecules for treating obstructive pulmonary diseases.

This development plan contributes to advancing knowledge in pneumology and implementing effective health strategies aimed at personalized diagnostics and treatments adapted to patients' needs. Commitment to research excellence and support for young researchers are central elements to achieving this goal, making research an essential tool for improving public health.

My general objective is to develop health strategies that promote early detection and personalized treatment of lung diseases.