

Title of habilitation thesis: **Emerging/re-emerging infections: from pathogen to diagnosis, clinical manifestations, treatment and prevention**

Author: **Violeta Tincuța Briciu**

## ABSTRACT

The habilitation thesis entitled "**Emerging/re-emerging infections: from pathogen to diagnosis, clinical manifestations, treatment and prevention**" is structured in two parts.

The first part of the habilitation thesis is a synopsis of postdoctoral research, professional and academic performance. Thus, after obtaining the title of Doctor of Medicine in 2013 with the thesis "Study on prophylaxis and treatment of Lyme borreliosis in Transylvania ", the topic of postdoctoral research was represented by emerging/re-emerging infections, respectively vector-borne (re)emerging infections, respiratory (re)emerging infections and food-borne parasitic zoonotic (re)emerging infections. The studies carried out investigated aspects related to the identification of the etiological pathogen by modern diagnostic methods, confirmation of the disease diagnosis, investigation of clinical manifestations, as well as evaluation of the results of therapy or prophylaxis through vaccination, addressing (re)emerging infections such as Lyme borreliosis, arboviruses, Dirofilariasis, COVID-19, influenza, or infections with *Trichinella spiralis*, *Toxoplasma gondii*, *Giardia* spp., *Cryptosporidium* spp., *Echinococcus* spp. and *Toxocara canis*. I had a scientific activity proven by the publication of 27 ISI – Clarivate Analytics scientific articles, of which 17 as principal author. Of the articles, 13 were published in quartile 1 journals (7 as principal author), and 11 in quartile 2 journals (8 as principal author). The cumulative impact factor as principal author (FCIAP) is 57,294. The appreciation of scientific production through the Hirsch Index in the Clarivate Analytics databases is 6, in Scopus 8 and in Google Scholar 9. I have participated in 11 research projects, of which 5 national projects won through competition (one as project partner's lead and 4 as member in the project) and 6 international projects (3 funded by the HORIZON 2020 Programme, 2 by the FP7 Programme and one by the COST Programme). I have presented, as first or unique author, 43 papers at national conferences and 12 at international conferences.

As for my professional activity, in 2014 I became a senior specialist in the specialty of Infectious Diseases, continuing my activity in the Clinical Hospital for Infectious Diseases, Cluj-Napoca. I have obtained certificates of complementary studies in "General Ultrasonography" and "Health Services Management". Since February 2018, I have held the position of Medical Director of the hospital, a position with numerous challenges, one of the most difficult being the organization of medical activity during the COVID-19 pandemic.

Regarding academic development, I have passed through the classic stages of university career (assistant professor in 2008, lecturer in 2016, associate professor exam passed in the first session of the academic year 2023-2024) within the Infectious Diseases Discipline, "Iuliu Hațieganu" University of Medicine and Pharmacy, Cluj-Napoca. I am teaching the "Infectious Diseases" lectures for the French series of the Faculty of Medicine and Dental Medicine, the optional lecture on "Tropical Infectious Diseases", practical activities in infectious diseases, and in 2018 I was voted by the graduate students of the Faculty of Medicine, the French series, as the "Dean of soul". I have published 2 books and 8 book chapters. I have been coordinator and collaborator of numerous postgraduate courses and member/president in numerous examination boards.

In the second part of the thesis are presented the main research, professional and academic development plans. I will continue the research activities within the topics already presented, but I will also target new areas of research. Continuing the theme of vector-borne (re)emerging infections, I intend to initiate research into other infections like West-Nile encephalitis or leishmaniasis. In the field of (re)emerging respiratory infections, I intend to conduct a study on respiratory syncytial virus infection. In addition, I intend to expand the field of research on the topic of antimicrobial resistance, with a project on multidrug-resistant bacterial infections and the emergence of genes for resistance in Gram-negative bacteria. Another topic of interest is HIV infection, the object of one research being to investigate the distribution of HIV-1 genotypes and to analyse resistance mutations in HIV-1 isolates from patients naïve to antiretroviral therapy.

From a professional point of view, as medical director, I intend to continue the projects on hospital development, as well as to increase the offer of medical services, through projects such as a Specialized Emergency Ward for Infectious Diseases and an Intermediate Care Ward for the Elderly. In order to improve my knowledge in Health Services Management, I aim to attend courses in the field and, in addition, I intend to continue medical education in the specialty of infectious diseases.

Regarding the development of the teaching activity, I aim to promote high-performance medical education in the field of infectious diseases. I will focus on improving teaching techniques and materials, I would like to apply for a teachers' Erasmus scholarship in France, and for the students of the French section I intend to publish a volume entitled "Collection of clinical cases in infectious pathology".

I will actively involve students and residents in the research process, I will support young PhD students and discipline colleagues to access research funds, and I will ensure a sustained research activity as a team, in order to increase the visibility and reputation of the university.