Habilitation Thesis

Interdisciplinary approach in pediatric neuropsychiatric diseases

SUMMARY OF THE THESIS

Motto: "I think education is about being passionate about something.When you see passion and enthusiasm you can convey the educational message" - Stephen Robert Irwin

The Habilitation Thesis titled "An Interdisciplinary Approach to Pediatric Neuropsychiatric Disorders" serves as both a comprehensive overview of my medical, teaching, and research endeavours, and as a foundational work outlining my trajectory as a physician and as a coordinator of teaching and research activities.

The habilitation thesis is structured in three parts that respect the criteria recommended and approved by the National Council for Attestation of University Degrees, Diplomas and Certificates (CNATDCU).

While the multidisciplinary approach involves collaboration among disciplines without necessarily achieving deep integration, the interdisciplinary approach fosters close collaboration and deeper integration among specialists from various fields, aiming for a more comprehensive understanding and more effective solutions specifically in the context of neuropsychiatric diseases.

SECTION A :

This section outlines my professional background, together with my colleagues from the research teams, focusing on my specialized expertise in the genetics of neuropsychiatric disorders, emphasizing the findings I have achieved and subsequently published. Over the course of 22 years,

I have dedicated myself to the comprehensive study, treatment, and research of genetic neuropsychiatric disorders.

Chapter I entitled "Interdisciplinary approach of intellectual disabilities" includes results of my research projects in the field of genetic mechanisms of intellectual disabilities in children and my contribution to phenotypic and genotypic aspects of some rare genetic syndromes.

Chapter II, " Interdisciplinary approach in epileptic syndrome / brain malformations" focuses on the impact of genetic anomalies on the development and prognosis of epileptic seizures. I studied the epilepsy as a main syndrome in the most common genetic syndromes and, also, in children with brain malformations.

Chapter III, entitled " Interdisciplinary approach of autism spectrum disorders" (ASD), approaches one of the most complex condition in pediatric neuropsychiatry. As part of a European project aiming at evaluate the clinical and social aspects of ASD, I was involved in several studies about erly diagnosis of ASD, early interventions programs for children with ASD, social and economic aspects related to ASD, medical and social aspects related to ASD in adults. Another field of my research studies is represented by genetic mechanisms of ASD.

SECTION B :

This section includs details the main areas of interest of my scientific research, outlining future directions of investigation. Neurogenetics is a sub-speciality found in an ongoing self-discovery process, bringing together data from genetics and neuropsychiatry for a more comprehensive approach of these fileds of medicine, a field which I would like to develop also in Romania. The terrain is especially permissive for those who understandfollowing their passion and curiosity.

My scientific ambitions are related to the discovery of novel genetic variants in patients with neuropsychiatric conditions with important implications in management plan of these patients and for a proper genetic counselling of their families.

The impact of genetic factors in association with the enviromental factors on the psychomotor development of children with genetic disorders is another research area that warrants my attention. I have been diagnosing and treating such diseases for a significant period and have come

across multiple aspects related to interdisciplinary complex approach of their management. As such, establishing a genotype-phenotype correlation, as wellas supervising and acquiring state-of-the-art treatment for my patients is one of my goals.

SECTION C: includes a list of bibliographic references cited in the habilitation thesis.