ABSTRACT

This habilitation thesis presents my scientific, didactic and academic activity after obtaining the doctoral title in medicine. In 2009 I finalized my doctoral thesis entitled: The role of immunohistochemical markers in prognosis evaluation and carcinogenesis mechanism of colon tumors. Scientific coordinator of the thesis was Prof. Dr. Jung Ioan, and I was granted the scientific title of DOCTOR in MEDICINE by the ORDER OF THE MINISTRY OF EDUCATION, RESEARCH AND INNOVATION no. 3492 from 23 MAR 2010.

During the above mentioned period I performed my scientific, didactic and academic activity as staff member of the Anatomy and Embryology Department of the University of Medicine and Pharmacy of Tîrgu-Mures, initially as assistant professor, and currently as associate professor.

My scientific activity following finalization of my doctoral thesis comprised several research directions: (1) Study of prognostic markers of colon adenomas/polyps; (2) Morphological, imaging and immunohistochemical studies of the fetal period of human development; (3) Study of EGFR mutations in non-small cell lung cancer; (4) Study of the BCR-ABL fusion gene in chronic myeloid leukemia.

The study of colon adenomas/polyps is the main research topic, and it is the continuation of the results and principles presented in the doctoral thesis. This activity is supported in the list of relevant papers by 2 articles published in ISI impact factor journals, 3 articles published in BDI database indexed journals, and 12 short publications presented at national and international scientific meetings as first author.

These publications are the result of research projects. In 2010 I have participated at a scientific selection competition for a postdoctoral fellowship at the University of Medicine and Pharmacy of Tîrgu-Mureş, through which I begun my activity as postdoctoral fellow in the program called "Doctoral and postdoctoral programs to support research". The title of the research project was: "The role of molecular biology markers in assessment of prognosis and carcinogenetic mechanisms in colon tumors". In 2013 I have successfully participated at the Internal Grants Competition organized by UMF Tîrgu-Mureş, and the application entitled "The role of immunohistochemistry markers in assessment of prognosis and carcinogenetic mechanisms in precancerous lesions of the colon" was recommended for financing (CIGCS nr. 24/11.12.2013). In this program that took place in 2014 I continued my studies in this research topic as head of project.

The subchapter entitled "Morphological, imaging and immunohistochemical studies of the fetal period of human development" presents activities performed in research teams, which eventually lead to several interdisciplinary studies: (a) Study of certain immunohistochemical markers in the epithelium of the fetal gastrointestinal tract and endocrine nervous system; (b) Study of certain immunohistochemical markers in fetal odontogenesis; (c) Morphological and ultrasound study of hip development during the fetal period and postnatal life; (d) Imaging study of the development of the fetal and postnatal skull base. The results of these studies were presented as main author in 3 in extenso articles published in ISI impact factor journals, 5 articles published in BDI database indexed journals, and 9 abstracts presented at national and international scientific meetings as coauthor.

The subchapters "Study of EGFR mutations in non-small cell lung cancer" and "Study of the BCR-ABL fusion gene in chronic myeloid leukemia" describe the results of molecular biology studies performed at the Molecular Biology Laboratory of the Anatomy Department. The results of these studies lead to publication of 4 articles published in ISI impact factor journals, 3 articles published in BDI database indexed journals, and 10 short publications presented at national and international scientific meetings as main author and coauthor.

Regarding these multidisciplinary topics, together with my colleagues we were able to publish 2 books as first author.

My field of didactic expertise is human anatomy and embryology. I am a teaching staff member since 2004, when I was employed at the Anatomy and Embryology Department of the University of Medicine and Pharmacy of Tîrgu-Mureş as entry level staff member (2004-2007). Between 2007 and 2011 I was junior assistant professor; between 2011 and 2014 I was assistant professor, and currently I work as associate professor. During my didactic career I wrote courses, I organized scientific circles, I coordinated graduation theses, master's theses, and I was part of the tutor system.

My academic activity is attested by citations of articles published in ISI journals, invitations to be part of the editorial board of several ISI and BDI journals, memberships in supervision committees of doctoral students, coordination of several studies and preparation of certain doctoral theses, coordination of certain scientific and educational manifestations, participations at numerous national and international scientific meetings, as well as membership in certain national scientific bodies.