EDITORIAL

















Doctoral and post-doctoral research – a priority of the Romanian postgraduate education system (Doc-Postdoc)

On November 12, 2014, the project action "Doctoral and post-doctoral research – a priority of the Romanian postgraduate education system (Doc-Postdoc)" held its Official Opening Conference in Bucharest at Athénée Palace Hilton.

The project focuses on supporting doctoral and post-doctoral research in Romania, and is cofinanced by the European Social Fund through the Sectoral Operational Programme for Human Resources Development 2007–2013; priority axis 1. "Education and training in support for growth and development of a knowledge based society"; key area of inter-



vention: 1.5. "Doctoral and post-doctoral programs in support of research"; contract code: POSDRU/159/ 1.5/S/137390. The beneficiary of the project is "Carol Davila" University of Medicine and Pharmacy from Bucharest, in partnership with two other major universities in Romania: the University "Politehnica" of Bucharest, and the University of Medicine and Pharmacy from Tîrgu Mureş.

The conference presented the aims and objectives of the project and brought together a blend of academics and practitioners, from both the beneficiary and the associated partners, members of the management and implementation team, invited guests, but most important PhD students and post-doctoral



researchers who had the opportunity to present their research within the frame of the project. The talks covered a wide variety of topics ranging from biomedicine and bioengineering to medical research focusing on infectious pathology, metabolic diseases, tumor pathology, cerebrovascular and cardiovascular pathology, neuromuscular pathology, digestive and respiratory diseases.

Dr. Alexandra Bastian opened the talks focused on pathology, by introducing the complex and incompletely explored clinical, pathological and molecular patterns of unknown types of limb-girdle muscular dystrophies.

Giving the variable severity of the disease, with the existence of aggressive forms progressing toward early immobilization and cardio-pulmonary involvement, the screening for new molecular targets such as the expression of anoctamin 5, alpha-dystroglycan and caveolin 3 might shed more light on the pathogenesis of this spectrum of diseases, even to guide future mutational studies in these patients.

Dr. Filip Perde, a PhD researcher who has already benefited from a mobility within the frame of this project at the Institute of Cardiovascular Sciences affiliated to the University of Manchester – UK, continued the presentations with an interesting talk on the possibility of identifying the molecular

1532 Daniela Adriana Ion

peculiarities of the sinoatrial node among the conduction system of the heart on post-mortem tissue. His

work was supported by state-of-the art techniques at the tissue level, such as confocal microscopy, whole-slide scanning fluorescence microscopy, qRT-PCR or micro-CT, in the endeavor of offering a better characterization for the expression patterns of different ionic channels and molecular markers such as connexins and caveolins. Beyond anatomical and histological profiling, the focus of the study is also toward a better diagnosis and understanding of arrhythmias, estimation of the risks to develop an arrhythmia and developing more targeted therapies.

Dr. Virginia Chiţu continued with the importance of paralleling clinical and dermoscopy imaging with multi-sectional histopathology in diagnosing



incipient melanoma. Histopathology remains the gold standard besides sequential dermoscopy in differentiating clinically featureless incipient melanoma from benign lesions (simple nevi, atypical nevi, seborrheic keratosis, hemangiomas, etc.), while individual dermoscopy alone cannot achieve 100% diagnostic accuracy.

Still in the field of dermatopathology, Dr. Tiberiu Tebeica presented a review on the histo-



pathological and molecular patterns of the most frequent primary cutaneous lymphoma, mycosis fungoides. The tumor cells are represented by an epidermotropic infiltrate of clonally expanded CD4+ T-cells, an essential diagnostic feature differentiating it from inflammatory dermatoses exhibiting similar clinical and histopathological patterns. Dr. Tebeica continued with describing the fine associated morphological changes of the epidermis and dermis, as well as of the patterns of the inflammatory infiltrate in corroboration with the immunohistochemical diagnosis, his experience relying on more than 70 diagnosed patients and 30 control cases. Lastly, his objectives are to further increase the study groups and to offer a better characte-

rization of these associated and relatively unexplored histopathological changes.

Based on the preliminary data presented at the conference, the quality of the research based on the implementation of this project will be most likely the avenue for new and significant pathological and clinical findings leading to new trends that can help push forward the frontiers of knowledge in their respective fields.

Professor Daniela Adriana Ion, MD, PhD

Department of Pathophysiology II

"Carol Davila" University of Medicine and Pharmacy
37 Dionisie Lupu Street, 020022 Bucharest, Romania

E-mail: danielaion7@ymail.com