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**BASTION - FROM BASIC TO
TRANSLATIONAL RESEARCH
IN ONCOLOGY**

Report on the stay of Dr. Dominika Nowis at the Department of Neurological, Neuropsychological, Morphological and Movement Sciences, Medical University of Verona, within the 7PR21/BASTION/WP1 (Twinning - WP1.9)



Dr Nowis and Dr Guglielmi in the Cell Culture Facility of the Laboratory of Neuropathology, University of Verona.

From August 29th till September 28th, 2013 I visited Department of Neurological, Neuropsychological, Morphological and Movement Sciences, Medical University of Verona, Italy and conducted research together with Dr. Gaetano Vattemi (who is the twinning partner of my research team) and his post-doctoral fellow Dr. Valeria Guglielmi in the field of muscle cell pathophysiology.

Dr. Vattemi is a clinical neurologist practicing at the Department of Clinical Neurology, G.B. Rossi Teaching Hospital in Verona and a successful scientist contributing to the knowledge in the field of skeletal muscle disorders such as dermatomyositis, polymyositis, inflammatory myopathies, myofibrillar myopathies, sporadic inclusion body myositis, and Brody disease. His research group isolates and propagates primary human skeletal myoblasts that allow for physiological and pathophysiological studies in the unique clinical material.

The main goal of my four-week stay in Verona was to perform final experiments for our joined project aimed at the evaluation of the influence of anti-tumor drugs on skeletal muscle structure and function. I had a chance to learn how to culture primary human skeletal myoblasts and how to differentiate them into multinuclear myotubes for subsequent experiments. Together with Dr. Vattemi and Dr. Guglielmi we also collected samples for further biochemical studies to be performed at the Department of Immunology, the Medical University of Warsaw. Moreover, I continued the work initiated in Verona by my post-doctoral fellow Dr. Malgorzata Firczuk on evaluation of endoplasmic reticulum stress induction and triggering of unfolded protein response in patients suffering from different types of myopathies.

During my stay at the Department of Neurological, Neuropsychological, Morphological and Movement Sciences, Medical University of Verona I also had an unique opportunity to witness the diagnostic process of skeletal muscle disorders and to get familiar with biochemical and functional studies of skeletal muscles samples.



Dr. Martina Tinelli, Dr. Valeria Guglielmi, Dr. Gaetano Vattemi and Dr. Nowis discuss the research progress in their joined project on the influence of anticancer drugs on skeletal muscle structure and function.

Moreover, I participated in several meetings with physicians (hematologists and neurologists) and scientists participating in our main research projects to thoroughly discuss the progress in our studies and to plan our future research and collaboration.



Dr. Nowis at the entrance to the Laboratory of Neuropathology, University of Verona.