



From Basic to Translational Research in Oncology

## Report on the visit of Justyna Chlebowska in the Laboratory of Neuropathology, University of Verona within 7PR21/BASTION/WP1 (Twinning)

From May 26<sup>th</sup> till June 6<sup>th</sup>, 2014 I visited the Department of Neurological, Neuropsychological, Morphological and Movement Sciences, Medical University of Verona, Italy. My visit was coordinated under the twinning agreement between the Medical University of Warsaw and the University of Verona within WP1 (Task 1.9). During this stay I was working within the research team of Dr. Gaetano Vattemi.

Dr. Vattemi is an expert in muscle disorders including dermatomyositis, polymyositis, inflammatory myopathies, myofibrillar myopathies, sporadic inclusion body myositis, and Brody disease. Dr. Vattemi is a practicing neurologist at the Department of Clinical Neurology, at Borgo Roma Hospital in Verona and he has access to unique clinical material.

Dr. Vattemi recent research interest focuses on facioscapulohumeral muscular dystrophy (FSHD). FSHD is one of three most common genetic diseases of skeletal muscles (the prevalence is 7/100,000). FSHD is an autosomal dominant inherited form of muscular dystrophy that initially affects the skeletal muscles of the face (facio-), scapula (scapula-) and arms (humeral).

During my stay at the laboratory of Dr. Vattemi I learned numerouslaboratory techniques such as primary human mioblasts culture, immunostaining of frozen sections of muscle biopsies, 2-D electrophoresis and preparation of samples for transmission electron microscopy analysis. Together with Dr. Vattemi and Dr. Valeria Guglielmi we analyzed results obtained from whole exome sequencing of samples of patients suffering from FSHD and planned experiments to elucidate the pathogenesis of this disease. We performed several immunostainings of proteins which structure and/or function could be impaired in FSHD.

Moreover, we spent some time on discussion and final analysis of the data obtained during the implementation of the joint project of the Medical University of Warsaw and University of Verona on musculotoxicity of anti-cancer chemotherapeutics.



Justyna Chlebowska at the Laboratory of Neuropathology, University of Verona.