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## BASTION – FROM BASIC TO TRANSLATIONAL RESEARCH IN ONCOLOGY

Report on the visit of Małgorzata Bobrowicz in the Laboratory of Molecular Biology and Immunology of CLL, University of Cologne, Clinic I of Internal Medicine, Cluster of Excellence in Aging Research, Cologne, Germany within 7PR21/BASTION/WP1 (Twinning)



CECAD (Cluster of Excellence in Aging Research) Main Building

From January 26<sup>th</sup> till February 6<sup>th</sup>, 2015 I had a pleasure to participate in the Twinning scientific exchange in Laboratory of Molecular Biology and Immunology of CLL in University of Cologne. This laboratory, led by world famous Prof. Michael Hallek – an acknowledged specialist in the field of biology and therapy of chronic lymphocytic leukemia (CLL), is a part of Cluster of Excellence in Aging Research, an innovative multidisciplinary research unit in University of Cologne. During my stay I had a chance to be a part of a research team of Dr. Lukas Frenzel, a haematologist and active scientist whom I had met during ASH Conference in December 2014. At our first meeting at ASH Conference in San

Francisco we had established the basis of our collaboration and defined our common interests. The laboratory of Dr.Frenzel focuses mainly on the lipid modification of proteins involved in the pathogenesis of CLL in aim to improve the therapeutic outcome of drug combinations in CLL. During my stay in Cologne I learned the methods to assess the palmitoylation status of proteins and performed experiments aiming at establishing if CD20 protein, an important therapeutic target explored in CLL, can undergo this modification. What is more I learned the methods of culture and co-culture of the cells isolated from patients with CLL, as the team of D.rFrenzel has very well optimized protocols in this field. The results obtained during my short stay inspired us to plan future experiments aiming at evaluating the influence of inhibitors of depalmitoylation on the efficacy of the therapy with monoclonal antibodies, part of which I will perform in our laboratory in Warsaw. Moreover, we established plans for our future collaboration. As a consequence, having performed initial experiments back in Poland, I will visit DrFrenzel Laboratory once again for 2 months in summer 2015. What is more, we agreed that I would apply for Etiuda scholarship funded by National Science Centre in Poland that would enable our future collaboration.

Apart from every day laboratory work, I had a unique opportunity to present my research during a Clinical Seminary held weekly in the Clinic I of Internal Medicine. I held a presentation entitled "The influence of histone deacetylase inhibitors on the expression of CD20 and the efficacy of anti-CD20 monoclonal antibodies", which generated an animated discussion. The questions asked by the audience will surely influence my future research. I have also received some valuable advice on the problems I encounter in my experiments.



Małgorzata Bobrowicz and Dunja Baatout from Dr Lukas Frenzel Team discussing the results of a series of experiments aiming at defining the status of palmitoylation of CD20 molecule