



BASTION – FROM BASIC TO TRANSLATIONAL RESEARCH IN ONCOLOGY

## Report of stay of Monika Kolanowska at the University of Ferrara, Italy within 7PR21/BASTION/WP1 (Twinning)

From 23<sup>rd</sup> of February until 22<sup>nd</sup> of March, 2015 I had the opportunity to visit research group of prof. Stefano Volinia at University of Ferrara, Italy.Prof. Stefano Volinia is thewell known expert in computational biology, author of near 200 publications in the field.

During my one month stay in Italy I was fortunate to be involved in two interesting projects. In the first we evaluated thesynergistic action of microRNAs and chemotherapeutic drugs on melanoma cell lines. We were able to point microRNAs which increases the effect of anticancer drugs on cells. Furthermore that experience let me to learn new methods related to cytotoxicity assays which we will consider to use in our studies in Warsaw.

In the second project we prepared vectors expressing pre-miRNAs. We selected 8 microRNAs significantly deregulated in breast cancer and melanoma and cloned sequences of their precursors to pcDNA3 vector. Prepared plasmids will be used for further evaluation of microRNAs effect on increasedor decreased activity of anticancer drugs.

Moreover Prof. Stefano Volinia is a great expert in Next Generation Sequencing, thus I have the opportunity to learn from him appropriate designing of experiments with use of this technology.



Monika Kolanowska with research group of prof. Stefano Volinia