Joanna Wabno  
Department of Physiology  
Institut of Pharmacology PAS  
St. Smetna 12  
31-343 Krakow, Poland  

Report

I took part in a two-month training (training period - January and February 2009) in prof. Michael Hollmann Laboratory (Department of Biochemistry I - Receptor Biochemistry, Ruhr University Bochum), as a scholarship holder of NENS stipend. The purpose of practice was to study biochemical techniques which will be used in my further research of PhD studies.

During that time I was participant of two regular courses: "Oocyte" and "Autoantibody". That was a chance to get known the most important and basic methods in biochemical laboratory. During the Oocyte course we were checking expression of ionotropic glutamate receptors in the Xenopus oocytes. Course included injection of cRNA into oocytes, electrophysiological recordings from oocytes and preparation of membrane proteins from oocyte membranes followed by gel electrophoretic separation. But also preparation and transformation of competent *Escherichia coli* and preparation of plasmid DNA from *E. coli*. In the Autoantibody course sera from patients suffering from multiple sclerosis were tested for autoantibodies to glutamate receptors. Ionotropic glutamate receptors were fitted with tags, expressed in HEK cells, then purified from the cells and run out on SDS gels. After blotting it was probed with patient and healthy control antisera.

Apart those courses I assisted in experiments of Lab members and studied Immunocytochemical staining, PCR (including reversed transcription and Real time PCR) and Western blot.

What is more I gave a speech on every week lab seminar to get close the topic of my PhD thesis to members of host laboratory. The title of presentations was: "Influence of imipramine and corticosterone on glutamatergic and GABAergic transmission in rat frontal cortex".

I also performed experiment which was directly connected with my PhD thesis - measurements of level of subunits of ionotropic glutamate and GABA receptors in whole brain tissue. Experiment included all steps of Western blot technique:
preparation of samples derived from mouse brain tissue, running SDS gel, incubation with antibodies, developing film and analysis of received results.