

Participation in ECNP Research Internship in Laboratory of Translational Psychiatry at Goethe University of Frankfurt am Main was a great opportunity and unique experience for me. The main goal of this internship was to learn the Golgi-Cox staining method. After performing all steps of the protocol, we have received silver impregnated sections of a wild-type mouse brain with well-identified dendritic spines types. One of the most important applications of this technique is evaluation of morphological alterations in neuronal dendrites and dendritic spines in the brains of animals treated with drugs. Application of this method will help me to expand opportunities for future research because visualization of neuronal and glial elements is of fundamental importance in neuroscience research projects.

I have also learned the double immunofluorescence staining using primary mouse and rabbit antibodies. I am going to apply this technique to estimate expression of different nitric oxide synthase isoforms in the activated rat glial cells within the projects scheduled in my laboratory. Besides, leaders of different working groups in Laboratory of Translational Psychiatry talked about animal models of mental illnesses with a focus on anxiety disorders and schizophrenia, brain microdialysis for measuring neurotransmitter release in vivo and some aspects of work with viral vectors for gene delivery to the central nervous system. In addition, I have taken part in the collection of data for experiments in such areas as psychiatric neuroimaging and neuropsychology. In conclusion, I would like to thank ECNP for providing this opportunity, Head of the Department of Psychiatry, Psychosomatic Medicine and Psychotherapy at Frankfurt University Hospital, Prof. Dr. med. Andreas Reif and Dr. Florian Freudenberg for mentorship and guidance. Participation in this internship also helped me to develop new plans for my future career.

