

22 July 2013

Dr. Nellia Nikolaevna Ivanchenko

Dear Dr. Ivanchenko:

This letter is a report on the work of Dinara Yesbolatova in my laboratory from late April, to early July 2013. Ms Yesbolatova came with only basic laboratory experience from her class work, and therefore had to learn quickly in order to make progress on her project. I set for Ms Yesbolatova a project to discover new allosteric regulators of the nicotinic acetylcholine receptor. Such compounds might give us an understanding of how to make better therapeutic drugs to help against nicotine addiction. Previous work in my lab, using computational methods had found a number of compounds that might act as possible allosteric activators. It was Ms Yesbolatova's task to learn the assay and test some of these compounds. The title of her project was: "Discovery of novel allosteric regulators of the Nicotinic Acetylcholine Receptor".

She worked hard learning a rather difficult assay. I taught her personally how to carry out this assay and how to use the instrumentation. This included using a research spectrofluorometer. She also had to learn the proper technique for handling highly toxic chemicals and learn the techniques for preparing membranes for the assay. She readily learned these tasks and could carry them out on her own. She carried out the assay and showed that she had mastered the assay and could get highly reproducible data. She tested it then on several compounds that had been described in the literature as having activity and showed some changes. Had she been able to stay the full time, she would have been able to test several unknown compounds as well.

On the whole, Ms Yesbolatova worked hard, learned new techniques very quickly, and was always helpful and courteous in the lab. She initially had some difficulty translating instructions from English, but she worked hard to overcome this challenge as well. Her ability to carry out experiments is very good. I can recommend her highly for work as a lab technician or for further education as a PhD student. She did very well in the time available. Please feel free to contact me should you have any questions concerning her performance.

Yours truly



Steen E. Pedersen, Ph.D.
Associate Professor