

Sabin Vaccine Institute
Texas Children's Center for Vaccine Development

July 26, 2013

Nellya Nikolaevna Ivanchenko
Coordinator Exchange Program BCM - KazNMU
nivanchenko@bk.ru

Dear Ms. Nikolaevna Ivanchenko:

This letter is to certify that during the period between April 23rd 2013 and July 3rd 2013, Mr. Mendaliyev Nurbol did an internship at the Sabin Vaccine Institute and Texas Children's Center for Vaccine Development at Baylor College of Medicine (BCM).

Sabin Vaccine Institute (Sabin) is a non-profit organization made up of scientists, researchers, and advocates dedicated to reducing needless human suffering from vaccine preventable and neglected tropical diseases (NTDs). In 2000, Sabin established an innovative Product Development Partnership (PDP) to develop new vaccines for NTDs. The Sabin Vaccine Institute PDP is comprised of academic, governmental, industrial, and NGO institutions, which, based on the target diseases, form consortium partnerships in order to advance the vaccine development programs. In 2011, as part of a new partnership with Texas Children's Hospital (TCH) and Baylor College of Medicine (BCM), Sabin's PDP relocated to the Texas Children's Feigin Research Center in Houston, TX creating the "Sabin Vaccine Institute and Texas Children's Hospital Center for Vaccine Development".

As you know, Mr. Mendaliyev Nurbol is a Master Degree student at the S.D. Asfendiyarov Kazkh National Medical University, working on the optimization of the effectiveness of clinical laboratory practice in Kazakhstan. For his internship, his objective was to learn new and modern methods of biochemical formulations and procedures used during a vaccine development process. He acquired experience in the processes needed for the development of recombinant protein vaccines learning new techniques for protein characterization, protein stability and vaccine formulation. Some techniques included buffer preparation (calculation of pH) and protein dialysis, SDS-PAGE and staining, densitometry, immunoblot analysis, high performance chromatography amongst others. In addition, he participated in multiple internal meetings and seminar and presented his finding during the vaccine center lab meetings.

We were very impressed with the capabilities and basic knowledge from Mr. Mendaliyev Nurbol. He interacted superbly with the entire team and immediately showed great effort into learning not only the English language but the tools of the trade in vaccine development and protein characterization. We believe that what he learned during the internship will be of great impact for his future professional advancement. We wish Mr. Mendaliyev Nurbol best of luck!!

Best regards,



Maria Elena Bottazzi, Ph.D.

Associate Dean, National School of Tropical Medicine

Professor, Pediatrics, Section of Pediatric Tropical Medicine

Baylor College of Medicine

Director Product Development

Sabin Vaccine Institute and Texas Children's Hospital Center for Vaccine Development

E-mail bottazzi@bcm.edu