

TWINNING ON DNA-BASED CANCER VACCINES



Individual Research Trainings

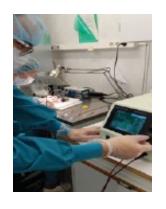
"DNA IMMUNIZATION AND FOLLOW UP OF IMMUNE RESPONSE IN MICE BY DIRECT IMMUNE AND INDIRECT BIOLUMINESCENCE-BASED METHODS"

May 26-August 5, 2016, MTC/Karolinska Institutet, Stockholm, Sweden

COACHES

Stefan Petkov, (MTC/KI); Elizaveta Starodubova (MTC/KI); assisting, MSi Anastasia Latanova





TRAINEES

Juris Jansons, PhD (RSU), Anda Vilmane, MSi (RSU).





AIM OF THE TRAINING

To master DNA immunization technique with injections and electroporation, and methodologies of screening of immune responses. Using these technologies to make a comparative assessment of immunogenicity of nine plasmid immunogens.

To understand the methods of DNA immunization, *in vivo* bioluminescent imaging (BLI) as a way to control DNA delivery and indirectly monitor the immune response development, and by the end of the tests, also actual methods of monitoring of the immune response, such as ELISpot, IFN-g/IL-2 Fluorospot, indirect ELISA and multi-parametric flow cytometry were trained.

RESULTS AND OUTCOMES

- Mastering of the technique of in vivo DNA transfection by electroporation.
- Mastering of the technique of in vivo bioluminescent imaging and processing of imaging data.
- Supplementary: first round of training of immune assays (all under supervision).

