

E. NOI FELLOWSHIP REPORT – LONG-TERM BENEFITS

NOI Fellowship Report concerning the evaluation of the long-term benefits must be sent no later than 12 months after the end of the fellowship to grant@noisk.sk. Specifically, indicate the scope of work during the fellowship in the report and highlight the achievement of goals together with the possibility of knowledge transfer for the Oncology in Slovakia.

NOI Grant with its assigned number must be acknowledged in all publications or presentations related to the fellowship results, and a citation of the publication or information about the conferences needs to be sent to grant@noisk.sk.

Name and titles of NOI Fellow:

MUDr. Anna Ballová

Contact Address of the Home Institution:

Department of Pediatric Hematology and Oncology, NUDCH, Limbová 1, Bratislava

NOI Fellowship Title and Objectives:

Innovation of standard procedures in collection, molecular diagnostics, and storage of biological material of CNS tumors in pediatric patients

NOI Fellowship Dates:

1.9.2021- 29.10.2021

Contact Address of the Host Institution:

Prinses Máxima Centrum, Utrecht, Netherlands

Overview of NOI Fellowship experience:

Thanks to the NOI grant, it was possible for me to complete a two-month internship at the Princess Máxima Centre (PMC), Utrecht, Netherlands. PMC is a new, modern hospital that was established in 2018 with the vision of centralizing pediatric oncology patients from all over the Netherlands. By centralizing health care, it is possible to ensure optimal treatment for all children. 600 patients are hospitalized here annually. Complex treatment of these patients is ensured by the cooperation of doctors from the Wilhelmina Children's Hospital (WKZ). In the PMC building, there are also centralized diagnostic laboratories. A very important part of the hospital is the research center, with more than 30 research groups. The close cooperation between the clinic, diagnostics, and research is an irreplaceable advantage at the Princess Máxima Centre.

During my two-month internship, I visited 3 departments – leukemia and lymphoma department (led by Dr. Natasji Dors), the solid tumor department (led by Dr. Annemarie Piek), and the neuro-oncology department (led by Lisethe Meijer), where I got to know the daily work of doctors and nurses. I participated in everyday rounds with doctors, once a week in a grand round, where patients were consulted with all oncologists, in educational seminars organized for residents and fellows in training. Tumor Boards were held twice a week in each department. There were discussed all the new patients, patients after follow-ups, and those who have completed their treatment. In addition to oncologists, radiologists, pathologists, neurologists, surgeons, neurosurgeons, and doctors from the radiotherapy department regularly participated in TB. Dutch colleagues were willing to hold all the mentioned seminars and meetings in English.

Another part of my internship was one-day observations in an outpatient clinic or other departments. I visited the radiotherapy department (at the University Medical Center), and the anesthesiology department with an emphasis on pain treatment, then I spent a day with a radiologist, a palliative care doctor, and an endocrinologist, I observed procedures (lumbar punctures, bone marrow aspiration and bone biopsy), assisted in pulmonary metastasectomy in a patient with osteosarcoma and I also observed neuro-oncological surgeries. I spent several days in the multidisciplinary outpatient clinic, at the daycare clinic, and at the LATER outpatient clinic for former patients who have been cured of cancer. Here, they focus on the late effects of treatment. For

three days, I had meetings with PhD students who were part of neuro-oncology research groups, and in the last week of my internship, I completed a course in diagnostic laboratories together with fellows in training.

Possible Knowledge Transfer for the Improvements in Oncology in Slovakia:

- Acquired contacts with world leaders in pediatric oncology
- The possibility of an internship at PMC for other colleagues as well
- Implementation of acquired information and knowledge at the home workplace
- Obtaining guidelines for supportive treatment of pediatric oncology patients and the gradual creation of guidelines for the Slovak Republic
- Processing a database of all pediatric patients diagnosed with a CNS tumor from years 2000 to 2020 who were treated and diagnosed at the National Institute of Pediatric Diseases in Bratislava
- Evaluation of the database, and comparison of OS in the years 2000-2010 and 2011-2020, thereby confirming a higher level of diagnosis and treatment
- Epidemiological publication in preparation – pediatric CNS tumors (2000-2020)

Place and Date

Bratislava, 29.10.2022

Signature