

Press release, May 26

## **Lithuanian and Swiss scientists jointly implemented eleven projects**

The final conference of the Lithuanian-Swiss cooperation programme “Research and development”, held on May 26, presented eleven projects implemented by the scientists of the two countries.

Prototypes for biological experiments, methods for evaluation of air quality, the properties of the agent of ash dieback, genetic research aimed at curing diabetes or establishing causes of intellectual disability – are some of research results shared by Lithuanian and Swiss scientist groups at the conference.

“We would like to thank Switzerland for support provided for joint Lithuanian and Swiss scientific projects which were successfully implemented,” said Deputy Minister of Education and Science Rolandas Zuoza. “We are happy with the achieved results: numerous joint publications of Lithuanian and Swiss scientists. A patent for some inventions has been filed and an application for funding by the EU’s programme Horizon 2020 is being prepared,” pointed out Mr Zuoza.

“The cooperation programme is very successful and beneficial to both Lithuanian and Swiss scientists. The established scientific contacts, the acquired experience and competences lay the foundations for the implementation of new activities. The cooperation of scientists at the international level, involvement in research networks and participation in international consortiums is necessary for dealing with global challenges, developing scientific competence and enhancing competitiveness,” stated Mr Zuoza.

The joint projects were started in 2012: four projects were implemented in the field of environment protection and technologies, three in the field of healthcare, and four in the field of life sciences. The projects were the result of cooperation between Swiss partners and Vilnius University, Kaunas University of Technology, Lithuanian University of Health Sciences, the Nature Research Centre, and the National Centre for Physical Sciences and Technology.

The scientist groups working with projects in the field of environment protection and technologies deepened their knowledge of factors determining Lithuania’s air quality, developed new methods for investigating not-quite-completely-researched models of air quality of European regions, provided new data on how to preserve and rationally manage peat resources, and investigated the biological and ecological properties of the pathogenic fungus responsible for ash dieback in the two countries.

When implementing projects in the field of health sciences Lithuanian and Swiss scientists discovered new rare genetically changes and new genetic areas related to intellectual disability, created and clinically evaluated a non-invasive absolute intracranial brain pressure method which does not require individual calibration for every single patient, and demonstrated innovative human genetic research which can be used to establish the origin of diabetes and choose an optimal treatment.

The results of projects in the field of life sciences included the solution of Leray’s problem which remained open for more than 80 years, the development of ten prototypes of DNA microarrays which will be applied in various biological experiments, the creation of a technological platform which will serve in research of metabolism of mammals’ individual cells or cell groups and metabolic changes which are highly important in cancer and neuronal research.

The conference also saw the presentation of nine projects of institutional partnership which were launched this year and are expected to present their results this autumn. Of these projects four are

implemented in the field of physical and technology sciences, two in the field of biomedicine, and one in the field of social sciences.

The projects are financed under the bilateral cooperation programme “Research and development” which is aimed at strengthening ties between the two countries, develop cooperation and deepen knowledge in the field of research and development of environmental sciences, technologies, health and life sciences, promoting cross-institutional cooperation and encouraging social and economic development in Lithuania. A CHF 9.7 million budget was allocated for the implementation of the programme. The period of the programme’s implementation is between 2010 and 2016.

“Research and development” is part of the cooperation programme of the Republic of Lithuania and the Swiss Confederation designed for eliminating economic and social differences in the enlarged European Union.