

Executive summary

The Institute of Biotechnology (IBT) in Vilnius, Lithuania is well known for its continued high quality research in the broadly defined field of molecular biotechnology. The Institute provides an interface between advanced education, basic research and technological development for the economic and social benefit of Lithuania and the European Union. IBT is internationally acclaimed for its multidisciplinary research on the structure of DNA restriction-modification enzymes, yeast genetics, development of biomedical recombinant proteins, small molecule inhibitors and bioinformatics.

The strategic goal of IBT is its integration into the European Research Area and strengthening its role as a leader in molecular biotechnology. Therefore, the purpose of the MoBiLi project which was a support action to strengthen the research capacities and to mobilize human resources in molecular biotechnology at the Institute of Biotechnology (IBT) Vilnius, Lithuania was to build up scientific excellence and human potential of IBT thereby transforming it into an excellence centre in molecular biotechnology and a significant player in the European Research Area. The major objectives of the MoBiLi project were: i). **Human capital building** for research and technological development (RTD) in the field of state-of-the-art molecular biotechnology; ii). **Networking of IBT with major centres of excellence in the EU** via joint research and mobility of researchers; iii). **Upgrading and modernisation of research infrastructure** in line with emerging thematic priorities in the field.

Following the guidelines for restructuring of Lithuanian research sector by the Parliament of the Republic of Lithuania, in 2010 the Institute of Biotechnology was integrated into Vilnius University and became a research institute within the University. Further development of the Institute of Biotechnology is tightly linked with the future strategy of the University. The modern research infrastructure Santara Valley with a major focus on biotechnology and molecular medicine will be created in 2015. Institute of Biotechnology together with Institute of Biochemistry and Faculty of Natural Sciences of Vilnius University are expected to merge into a Joint Center for Life Sciences at that time. This Center should serve as a nucleus of a knowledge-driven economy by concentrating the research potential and creating an environment for productive interaction between research institutions, studies and businesses in the areas of biotechnology, biopharmacy and molecular medicine.

Most of the IBT Weaknesses and Threats identified in the SWOT analysis elaborated when preparing the proposal have been clearly improved thanks to the MoBiLi project. Based on the results achieved it is evident that MoBiLi project had helped the IBT to increase interactions with the research teams within EU in research training and technological exchange, had prevented an unbalanced loss of young trained personnel, by obtained novel cellular imaging and high throughput approaches had paved the way to novel diagnostic tools and therapies and had significantly contributed to upgraded research infrastructure at the IBT. These achievements by the IBT are vital prerequisites to play a key role in the Center as it will provide the necessary expertise in the field of molecular biotechnology and biopharmacy. Importantly, one of Lithuania's smart specialization priorities (RIS3) for the next EU funding programming period is focused on the new health sector technologies and biopharmaceuticals including the development of new recombinant drug technologies, novel diagnostic technologies and molecular tools for a personalized medicine.

Regarding the MoBiLi project contribution to the Regional Development, it had improved considerably the research capacity in biotechnology (human capacity and research infrastructures) at the IBT and helped the launching of new biotech spin-offs and both activities can contribute to the future Lithuanian economic and social development.

In the concert with Development Programme for the Integrated Science, Studies and Business Centre (Valley) SANTARA launched by the Lithuanian Government, MoBiLi achievements pave the way for up to date environment for modern links between science and industry.