



**INSTITUTE OF GENETICS AND CYTOLOGY OF  
THE NATIONAL ACADEMY OF SCIENCES OF BELARUS**

**NATIONAL COORDINATION BIOSAFETY CENTRE**

**NATIONAL COORDINATION CENTRE ON ACCESS TO GENETIC RESOURCES  
AND BENEFIT-SHARING**

**MINISTRY OF NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION OF  
THE REPUBLIC OF BELARUS**

**SUMMARY REPORT ON THE KEY ROUND TABLE TAKE-AWAYS**

**“ENHANCING THE CEE COLLABORATION AND KNOW-HOW  
TRANSFER IN BIOTECHNOLOGY AND BIOSECURITY”**

The Republic of Belarus recognizes high importance of biotechnology development, including modern biotechnology, for healthcare, agriculture and industry. Science-driven and high-tech solutions can significantly improve the quality of life. At the same time, Belarus recognizes that the use of modern biotechnologies should be safe for the environment and humans and supports the theme “Ecological Civilization: Building a Shared Future for All Life on Earth”, which was chosen for the next world Conference on Biological Diversity in Kunming in 2020.

At the same time, the country's scientific community recognizes that research in the field of biotechnology and biosafety requires significant material costs, as well as human resources based on appropriate education and pooling of knowledge in many fields of science and the application of an interdisciplinary approach and the use of knowledge of genetics, molecular biology, biochemistry, embryology, cell biology, ecology, applied disciplines – chemical and information technologies and robotics. Therefore, in order to achieve progress in the field of biotechnology and biosafety, it is very important to combine efforts in these areas, especially at the regional level.

Recognizing the importance of regional collaboration in these areas, the Institute of Genetics and Cytology of the National Academy of Sciences, one of the country's lead institutions in the field of molecular genetics, biotechnology and biosafety, initiated a CEE Round Table “Enhancing the CEE Collaboration and Know-How Transfer in Biotechnology and Biosecurity” on September 18-20, 2019 in Minsk (the Republic of Belarus). The event was held jointly with the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus. The financial support was provided by the Central European Initiative (CEI) Cooperation Fund.

The Round Table brought together the scientists from CEI member countries, biosafety experts, experts on access to genetics resources and experts from international institutions – the International Centre for Genetic Engineering and Biotechnology (ICGEB), the European Commission's Joint Research Centre (JRC), government officials and decision-makers. The three-day Round Table was attended by 38 people representing Belarus, Moldova, Hungary, Serbia, Slovenia, Ukraine, Czech Republic, Russia and Italy.

The Chairperson of the State Committee on Science and Technology, Alexander Shumilin, opened the Round Table on September 18, 2019. In a welcoming speech at the Round Table's Opening Session, the Deputy Chairperson of the Presidium of the National Academy of Sciences of Belarus, Alexander Kilchevsky, and the Academician-Secretary of the Department of Biological Sciences, Mikhail Nikiforov, noted, inter alia, that biotechnological direction is among the development priorities of most Biological Institutes of the National Academy of Sciences of Belarus. In our country, the outstripping development of biotechnologies is driven by the Academy's efforts to create "Belbiograd" and the importance and necessity to work in the biosafety direction was emphasized. The welcoming speech by Nikolai Svidinsky, Head of the Biological and Landscape Diversity Division of the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus, reflects the importance of regulating safety in the genetic engineering activity at all of its stages.

During all three days of the Round Table, presentations were made by lead scientists and experts from CEE countries followed by discussions on the improved quality of research and strengthened cooperation mechanisms among the countries.

The first day was focused on the issues related to the development of modern biotechnology, molecular biology and molecular genetics, the exchange of scientific experience in the field of modern biotechnology, molecular biology and molecular genetics, the developments of the Republic of Belarus and CEE countries. The scientific support of ICGEB and JRC in these areas of scientific research was shone a spotlight, including capacity-building through the provision of expert support, the use of a modern technical base, the possibility of internships for young scientists. Nikolay Tzvetkov (Bulgaria) presented on the modern developments in the field of synthetic biology.

On the following day (day 2), the experience of the Republic of Belarus in regulating safety in the genetic engineering activity was presented, including the assessment of GMO risks, a new direction – bioethics in the field of DNA testing and biosafety, as well as legislative changes to improve regulatory mechanisms for modern biotechnologies. The experience of Slovenia, Moldova, Hungary, Serbia, JRC and ICGEB on the biosafety structure and GMO regulation was shared. Angela Lozan (Moldova) presented on the updated results of the examination of the Convention on Biological Diversity on synthetic biology objects and Aleksey Tarasjev (Serbia) also spoke about the role of the CPB Clearing-House for countries to fulfill their obligations under this International Treaty. Head of the National Coordination Biosafety Centre Galina Mozgova centered around the

importance of addressing socio-economic issues when deciding on GMOs and provided examples of how socio-economic considerations can influence decisions on placing GMOs at the market. Presentation of Rita Andorko (Hungary) echo this issue. Mojca Milavec (Slovenia) and Anastasia Shnyreva (Russia) presented tools and modern methods of the GMO detection, identification and quantification for monitoring purposes.

On the third day, the Deputy Chairperson of the Presidium of the National Academy of Sciences of Belarus, Professor Alexander Kilchevsky, presented on the development of genomics in the Republic of Belarus and Wendy Craig reported on the ICGEB's breakthrough research, the possibility of joint research, the ICGEB grant system, and the conditions for joining ICGEB. Private investigations of the advanced Laboratories of the Institute of Genetics and Cytology, NAS of Belarus, and the Institute of Microbiology, NAS of Belarus, were also presented. The Head of the National Coordination Centre on Access to Genetic Resources and Benefit-sharing, Elena Makeyeva, emphasized an important role of the Convention on Biological Diversity for the issues related to the biodiversity conservation and a role of Seed and DNA Banks in the conservation of valuable genetic resources and informed the Round Table participants on the existing legislative regulation of access to genetic resources and benefit-sharing in Belarus as a Party to the Nagoya Protocol.

During the three-day deliberations at the Round Table, the participants from CEE countries showed high interest in conducting joint research with research institutes of the Republic of Belarus. The Institutes agreed on cooperation in the field of modern biotechnology and biosafety. Information related to research projects in the field of modern biotechnology was shared, including educational and research grant programs, scholarships and capacity-building in the CEE Region as in the field of modern biotechnology and biosafety (e.g. Horizont 2020, COST Actions, Bio Bridge Initiative, Global Green Fund, CEI grants, etc.) and the issues related to ensuring of legal awareness of the procedure for the transfer of genetic resources and technologies of their utilization complying with the Nagoya Protocol Provisions.

The necessity of signing agreements between the State Committees on Science and Technology and the National Academies of Sciences of CEE countries as important mechanisms for the subsequent submission of joint research projects to participate in international competitions was emphasized. Information on the organizations that expressed a desire to sign a Letter of Intent with NAS of Belarus was submitted to the Deputy Chairperson of the Presidium of NAS of Belarus.

The importance to identify Centers of Excellence in countries based on research institutes with knowledge, material base and human resources and establish close ties between the Centers with a view of consolidated joint research was emphasized.

Among important mechanisms contributing to regional cooperation, the need to establish CEE Networking in the area of biotechnology, biosafety and legislative regulation of access to genetic resources in the Partner countries in the framework of international projects was expressed. The proposal of Belarus to become a

Contact Centre for ongoing communication (liaison) with the countries of this Networking on scientific cooperation issues and the development of joint projects was approved.

An opinion of the particular importance of supported basic research in biotechnology and biosafety, which form bases for new developments, was expressed. Since such studies receive less support in CEE than applied practice-oriented research, a joint search for donor countries interested in supporting of basic research in the CEE Region can be considered as one of the options. In addition, research in the area of biosafety and the conservation of genetic resources is needed to implement the Cartagena Protocol on Biosafety and the Nagoya Protocol on Access to Genetic Resources and Benefit-sharing. Therefore, tools for implementing these two major Protocols, e.g. UNEP-GEF projects and the Bio Bridge Initiative, can become support of such fundamental projects' implementation.

A general opinion on the importance to hold such Round Tables for CEE was expressed, since they will allow to combine different target groups and share best practices. The necessity to conduct regional training events in the field of synthetic biology, biosafety and the conservation and inventory of genetic resources, using modern molecular genetic methods and the experience of experts from the Region and of international organizations, was also emphasized.

The Round Table also examined the prospects for Belarus to join ICGEB and establish closer cooperation with JRC as an important mechanism for improving the quality of scientific research in the field of biotechnology in such fast-growing areas as plant biotechnology, medicine biotechnology, molecular biology for basic and applied research, biosafety, improving the quality of education through participation in competitions for grants for an early career, internships, access to technical assistance and counselling services and access to Global Expert Networking. All materials were submitted to the afore-mentioned authorities – NAS of Belarus and the State Committee on Science and Technology.

Media coverage of the CEI Cooperation Activity with particular reference to the visibility given to the CEI:

<http://nasb.gov.by/eng/news/9630/>

<http://www.biosafety.by/18-20-sentyabrya-kruglyj-stol-ukreplenie-sotrudnichestva-stran-tsentralnoj-i-vostochnoj-evropy-i-peredacha-znaniy-v-oblasti-biotehnologii-i-biobezopasnosti/>