Speech of Secretary of State Ms. Oľga Nachtmannová – Current State of Biomedicine and Biotechnology in Slovakia

Dear Speakers,
Dear Distinguished Guests,

Thank you for the opportunity to speak to all of you here today. I would like to briefly present you current state of biomedicine and biotechnology in the Slovak Republic.

Slovakia has a long-term tradition in research and development in the fields that currently falls under industrial biotechnology. Applied microbiology and biochemistry has been a subject of research at Slovak Technical University in Bratislava for almost 60 years. The traditional food biotechnology and fermentation procedures have had a very important place in the Slovak industry structure. Universities in Slovakia see the importance of biotechnology in today’s science and research, therefore they have involved biotechnology curriculum in their master and post gradual programmes. Between the most important universities and research organisations in biotechnology are the Slovak University of Technology, Comenius University, and the Slovak Academy of Sciences with its various institutes.

Please allow me to briefly present them:

Firstly, Faculty of Chemical and Food Technology of the Slovak University of Technology in Bratislava is focused onto industrial microbiology, food technology and with the main emphasis on bioengineering awarding Bc (bachelor), Ing (Engineer) and PhD degrees. They also focus on white biotechnology – development and optimization of biocatalysis and bioprocesses. They are involved in excellent research, cooperating internationally and conducting applied research in collaboration with enterprises.

Secondly, Comenius University in Bratislava has a major contribution in biomedical and biotech research and education in Slovakia, with two Faculties of Medicine, Pharmaceutical Faculty and mainly Faculty of Natural Sciences, with an established Recombinant DNA technology research centre. Moreover, several spin-offs from red biotech/biomed research areas were built up.

But, most importantly - the biggest contribution to biotech research in Slovakia is represented by Biomedical and Biological Institutes at the Slovak Academy of Sciences. Institutes of Slovak Academy of Sciences in cooperation with Universities also organize PhD programmes in relevant science disciplines. The most active institutes in biotech research are: Biomedical Research Centre of Slovak Academy of Sciences, Institute of Molecular Biology and Institute of Neuroimmunology.

Biomedical Research Centre of Slovak Academy of Sciences is the largest Slovak institution devoted to basic and translational research in biomedicine. Biomedical Research Centre has been established
on 1st of January 2016 by merge of The Cancer Research Institute, The Institute of Experimental Endocrinology, The Institute of Clinical and Translational Research and The Institute of Virology.

Research at the Biomedical Research Centre is focused on understanding metabolic, endocrine, neurological, (auto) immune, infectious and oncological diseases and their mutual relationships in the same individual. As global biomedical research of the 21st century sees these co-morbidities as one of the key challenges of the human healthcare improvement, Biomedical Research Centre is also committed to this challenge.

Next is Institute of Molecular Biology of Slovak Academy of Sciences. The main emphasis of the Institute is focused on molecular biology of prokaryotes and research projects connected with construction of antibiotics and amino acid superproducents, organization of gene expression and molecular genetics aspects of nucleic acids metabolism and control of gene expression concerning cell differentiation.

Last but not least is Institute of Neuroimmunology of Slovak Academy of Sciences. Research at the Institute is focused on basics of neurodegenerative mechanisms from molecular level to organism level. Main aim is a study of Alzheimer disease. There is also established National Reference Centre for BSE diagnostics there.

Regarding the private sector – according to OECD database there are 15 biotech companies based in Slovakia, but this number is apparently underestimated. Real number of companies can probably reach amount about 40 to 50 companies. The employment in biotech sector may be estimated at over 1,000 to 1500 people, including almost 300 R&D employees. Most of the biotech companies in Slovakia are active in the Red biotech, but there are also companies focused on Agrobiotech and Industrial Biotech. While the institutional background for the biotech industry is very well developed, up to 75% of R&D activities are concentrated in Bratislava and surrounding region. Among the biggest companies we can find companies such as Biotika, Evonik Fermas, Danube clone, Axon Neuroscience, Geneton and Genexpress.

Dear participants of this conference, allow me to wish you success in acquiring the best possible professional experience and a lot of valuable information and new contacts.

Let me finally wish this event international, friendly and cooperative atmosphere.

Thank you for your attention.