LITHUANIAN LIFE SCIENCE SECTOR – THE NEW STAR IN LITHUANIAN ECONOMY

TOMAS ANDREJAUSKAS

PRESIDENT, LBTA

Lithuanian Biotechnology Association

- Unites over 100 Lithuanian biotech sector representatives
- Among others:
  - Largest Lithuanian and international biotech companies, operating their sites in Lithuania
  - Eight main science institutions (universities and institutes)
  - A number of Lithuanian biotech SME and startup companies, developing their business globally
  - A number of private academic researchers and scientists from the fields of biotech and life sciences
- Focusing on **Life Science**, **Health Technologies** and **Bioeconomics**
- Equal approach to applied and fundamental sciences
- Member of different international platforms, providing opportunities for international cooperation both in business and science

Lithuanian Life Science and Biotechnology Sector In Numbers

- Represents 3% of Lithuanian GDP with an ambitious goal to reach 5% by 2030
- Sector's export intensity 85%
- Sector's revenue in 2020 reached 2 bn Eur and recorded a fantastic 87% anual growth
- Over last decade Lithuanian biotech sector recorded a 10-fold growth, and for now it is the highest value added sector in national economy
- Private sector in 2020 employed around 2500 employees, LBTA members all together employed over 5000 emoployees in the field of biotech
- Each year 7 universities provide 420-470 graduates and post-graduates just in the field of biotech to the labor market, but demand is so great and we see more and more young people favouring biotech and life science studies

Mapping science competences

University	Developed Biotech Areas
Vilnius University	Gene editing technologies
	Cell engineering
	Metabolic engineering
	Synthetic biology
	Big data biology
Vytautas Magnus University	Aqua biotechnology
	Plant biotechnology
	Biomass and biowaste technology
Kaunas University of Technology	Food systems and biotechnology
	Chemical and environmental technologies
	Functional materials and technologies
	Plant, microorganism, algae biotechnology, their bioproducts and bioprocessing
	Regulation and engineering of gene expression
Klaipeda University	Bioactive materials and bioproducts
	Aqua biotechnology
	Environmental genomics
Lithuanian University of Health Sciences	Omic technologies and metabolic engineering
	Biotechnology-based bioeconomy
	Biotechnology-based personalized medicine

Lithuania is one of the homes of CRISPR-CAS9 gene editing Nobel price technology

Mapping business & science cooperation areas

RRF directions	Biotechnology business area	Existing business and science competences
Žaliosios inovacijos (Green Deal dalis: bio-economy; sustainable food) **Digitalistion direction (Digital Future)** **Health technologies (EU4Health)**	Molecular technologies in bioeconomy	Gene engineering, metabolic engineering, biomolecule synthesis, synthetic biology, omic technologies.
	Biotechnology-based bioeconomy	Biomass and biowaste technologies, sustainable and functional food products, aqua- and plant biotechnologies, environmental technologies.
	Digital solutions in the biotechnology sector	Personalized medicine, bioinformatics, process digitalization.
	Molecular technologies in medicine and biopharmacy	Gene engineering, gene therapy, omic technologies, metabolic engineering, biomolecule synthesis, synthetic biology.

Vilnius will host the largest annual EuropaBio event European Forum for Industrial Biotechnology and Bioeconomy

EFIB'22. Next generation economies: Industrial biotechnology for a sustainainable society

THANK YOU