

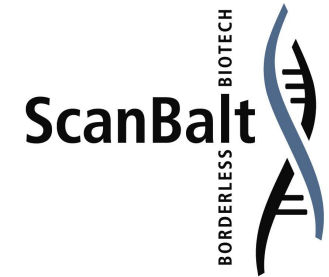


Estonian Biotechnology

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The ScanBalt BioRegion



Reykjavik

Oslo

Copenhagen

Hamburg

Stockholm

Helsinki

Tallinn

Riga

Vilnius

Warsaw

St. Petersburg

11 countries

Denmark, Estonia, Finland, North Germany, Iceland, Latvia, Lithuania, Norway, Poland, Russia (St. Petersburg, Kaliningrad), Sweden

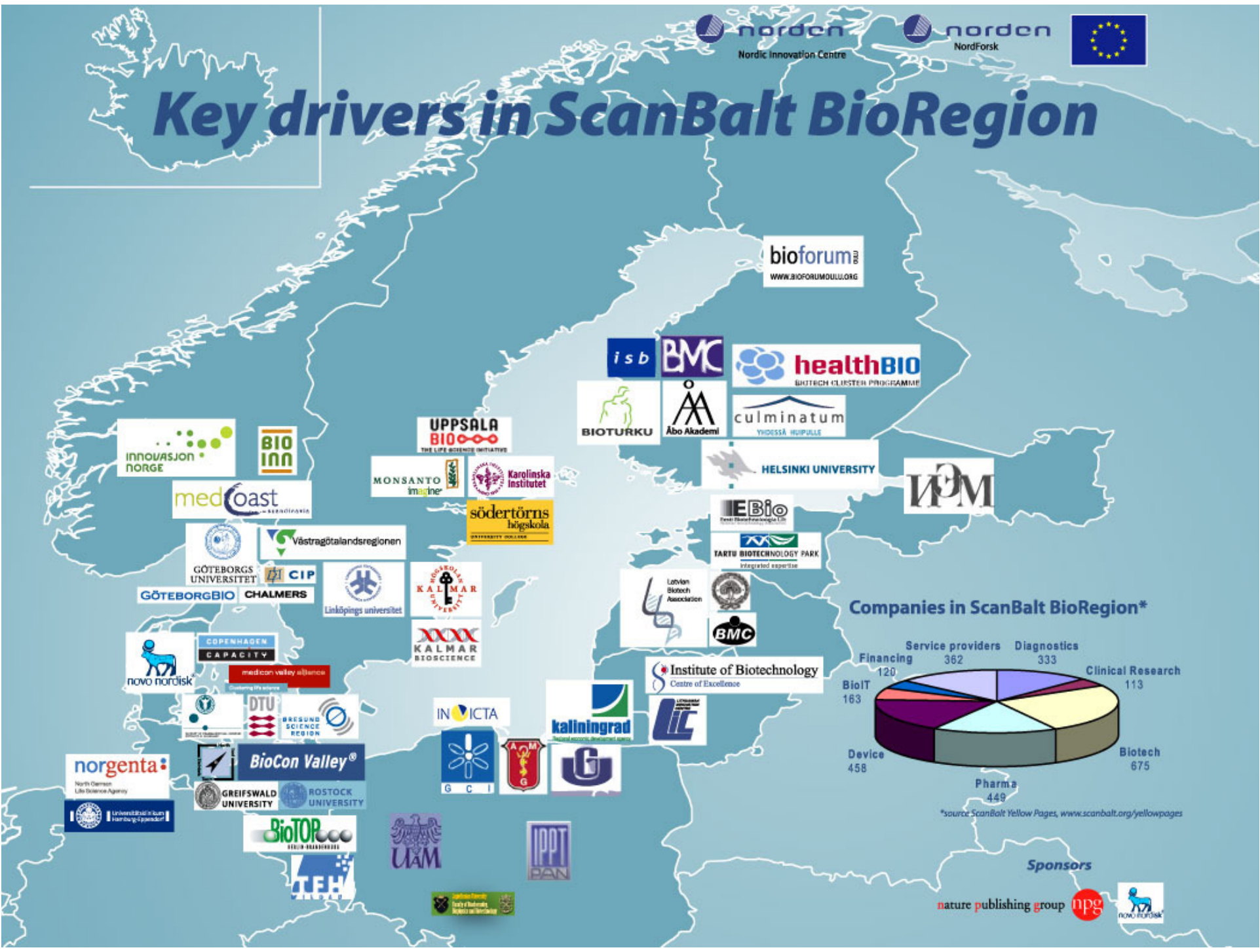
85 million people

67 universities

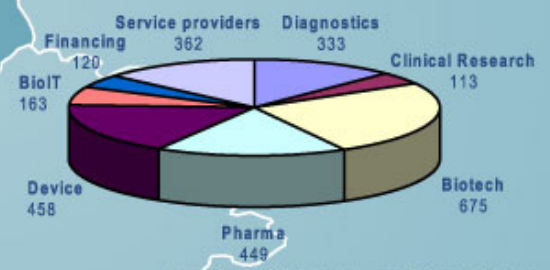
>700 Biotech/life sciences companies

www.scanbalt.org

Key drivers in ScanBalt BioRegion



Companies in ScanBalt BioRegion*



*source ScanBalt Yellow Pages, www.scanbalt.org/yellowpages

Sponsors



Key areas in Estonian Biotech

- genome-wide LD and association studies
- high-throughput genomic technologies
- cell cycle control mechanisms
- DNA tumor viruses
- DNA vaccine development
- gene therapy vectors
- behavioral molecular neuropharmacology
- neurobiology
- angiogenesis in tumor biology
- environmental biotechnology
- molecular genetics of biodegradation of aromatic compounds
- plant genetic engineering
- transgenic animal technologies, disease models
- eukaryotic vector design

Estonian strenghts

- Population genomics (Genome project, P3G)
- Contract research
- Biomedical infrastructure (gamma sterilization, clean room services etc)
- In vitro combinatorial chemistry, library building

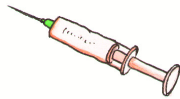
Infrastructure Institutions

- University institutes
- Clinical and pre-clinical facilities
- Estonian Biocentre (incl Citrina Laboratory)
- Tartu Science Park
- Tehnopol
- Tartu Biotechnology Park

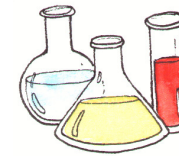




estonian genome project

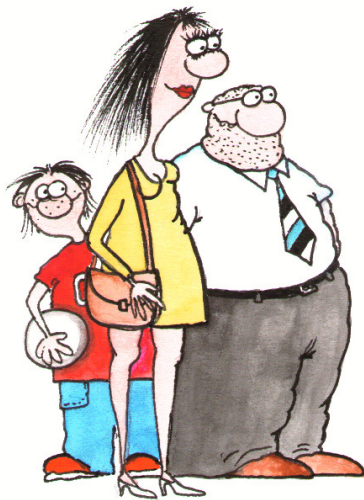


Blood sample

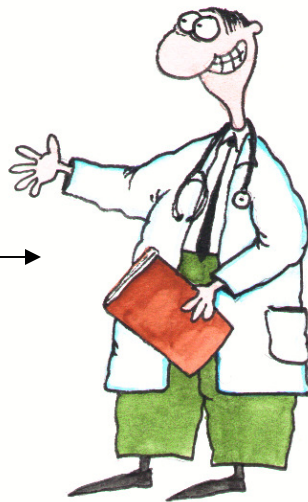


EBio
Eesti Biotehnoloogia Liit
Finnish Biotechnology Association

Laboratory



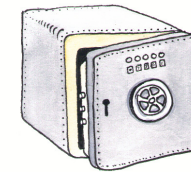
People



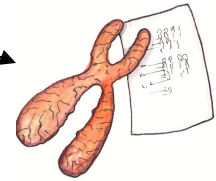
Family doctor



Coding centre



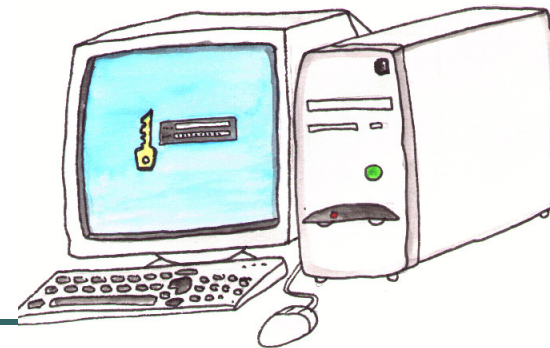
Depository



Gene
mapping



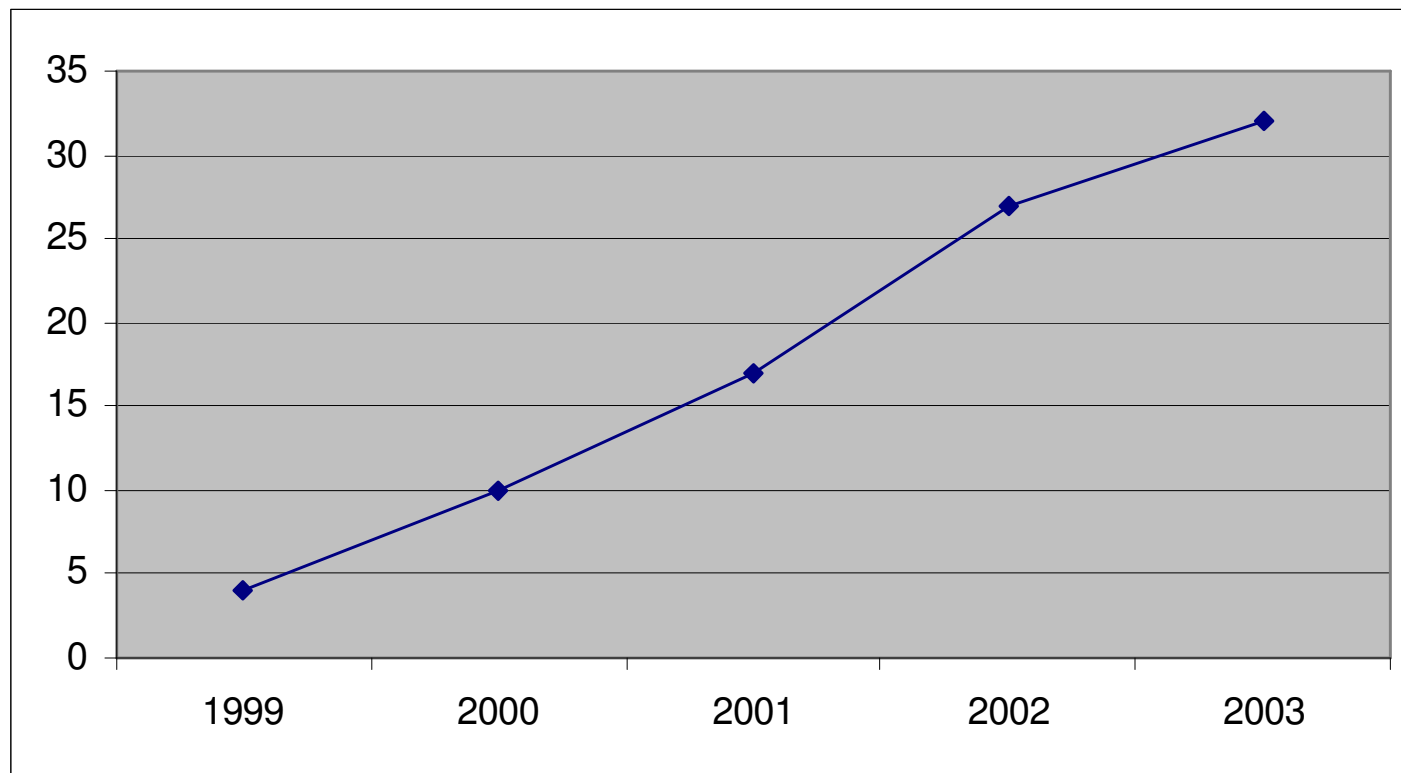
Questionnaire



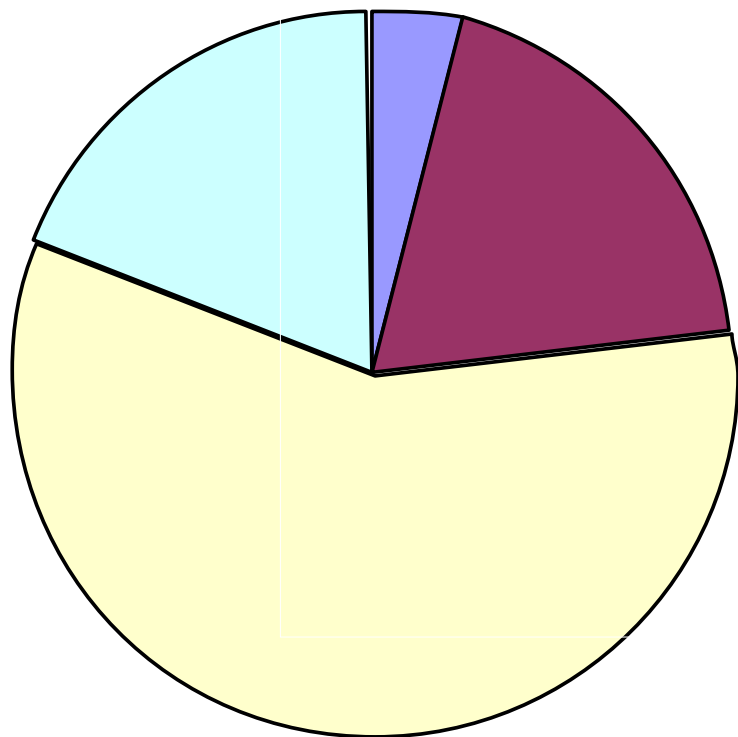
DATABASE

Number of Biotech Companies

(55 in 2007)



Biotech Companies in Estonia



- Agrobio
- Environm.
- Medical
- Biomaterials



www.biotech.ee

- Founded Feb 2003
- NGO to represent biotech community
 - Government and public on national level
 - Regional and international
- 22 institutional members from academy and industry

Biotechnology Association

- Coordination of international contacts/
representation of Estonian Biotech sector
- “Biotechnology environment”
- Contacts with other national associations (ITC
etc)
- Life science strategy by 2006
- Member of EuropaBio from March 04
- Regional ScanBalt activities
- BBIG

ESTONIAN BIOTECHNOLOGY STRATEGY 2008-2013



The ultimate purpose of the strategy is to provide input for that program, serving as an **advisory document** for the Estonian parliament, government and the local municipalities on how they could **efficiently support the Estonian biotechnology sector** and how the **sector itself could contribute to the future development.**

Vision

By the year 2013, Estonian biotechnology **will have passed the incubation phase** and will have become Estonia's fastest-growing sector with an annual turnover of at least 1.3bn Estonian EEK.

The development of the biotechnology sector and the broad utilisation of its results in traditional branches of economy will help to increase the global competitive position of the entire Baltic Sea region.

As the region is at the forefront of biotechnology development, international companies will direct increasing flows of investment to the Nordic countries, including Estonia.

Quality of Research and Human resources

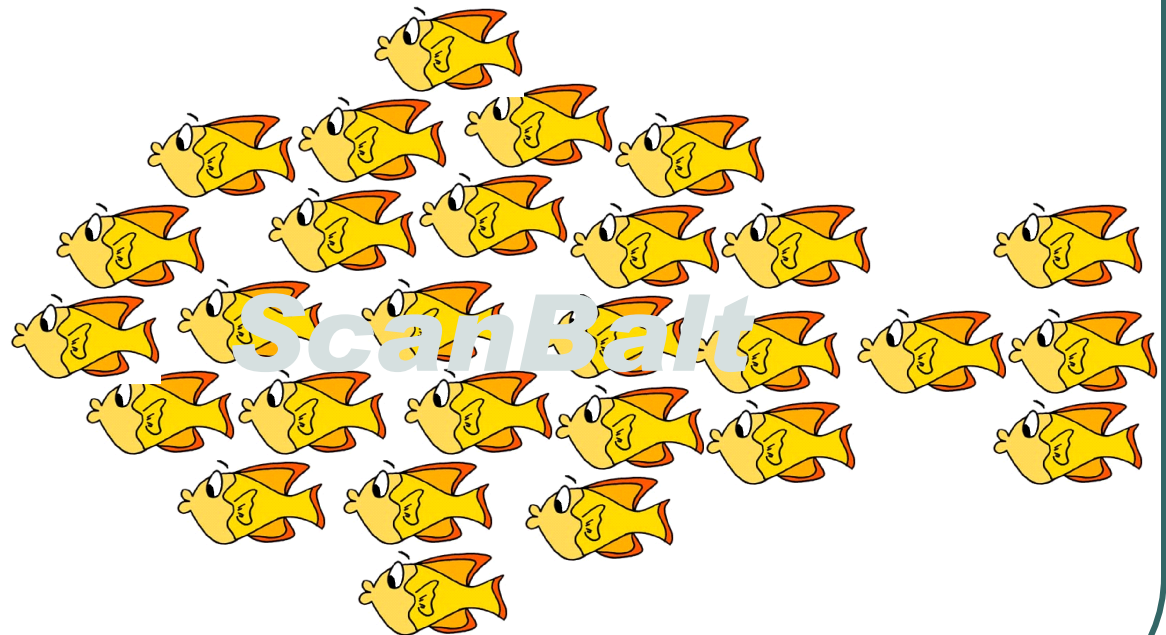
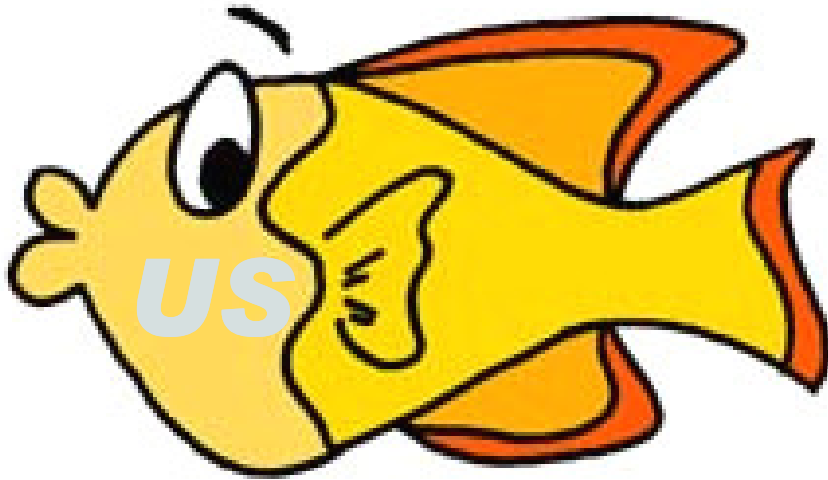
- Ensure proper scholarships for doctoral students in biotechnology.
- Organise contests for biotechnology post-doctoral fellowships abroad
- Offer grants to students majoring in natural sciences to study a minor subject abroad
- Develop a financing system for young and promising scholars enabling them create their own research teams
- Persuade top scientists to come or return to Estonia
- Offer enterprise internship opportunities for the students
- Support the training of biotechnology entrepreneurs
- Hire specialists from abroad to advise the companies on project preparation and drafting

Increasing the Inflow of Financial Resources

- Establish a program to finance the projects of R&D institutions for up to two years with a maximum amount of 2 million EEK as the proof-of principle
- Implement biotechnological projects in the companies in cooperation with R&D institutions
- Feasibility study of curiosity driven ideas both in R&D institutions and companies
- Financial support to the teams and companies able to bring in foreign grants or contractual financing
- Public support for the companies searching cooperation partners abroad
- Create a system where the state compensates part of the R&D costs of biotechnology companies

Improving the Environment and Regulations

- Implement a support scheme for agricultural and industrial biotechnology
- Maintain and, if necessary, create additional biotechnological core laboratories
- Facilitate the creation of a biotechnology cluster
- Better coordination of the work of bioethics institutions and committees and development of transparent and efficient ethical and legal regulation.



More information

- www.biotech.ee
- www.genomics.ee



Eesti Geenikeskus
Estonian Genome Foundation