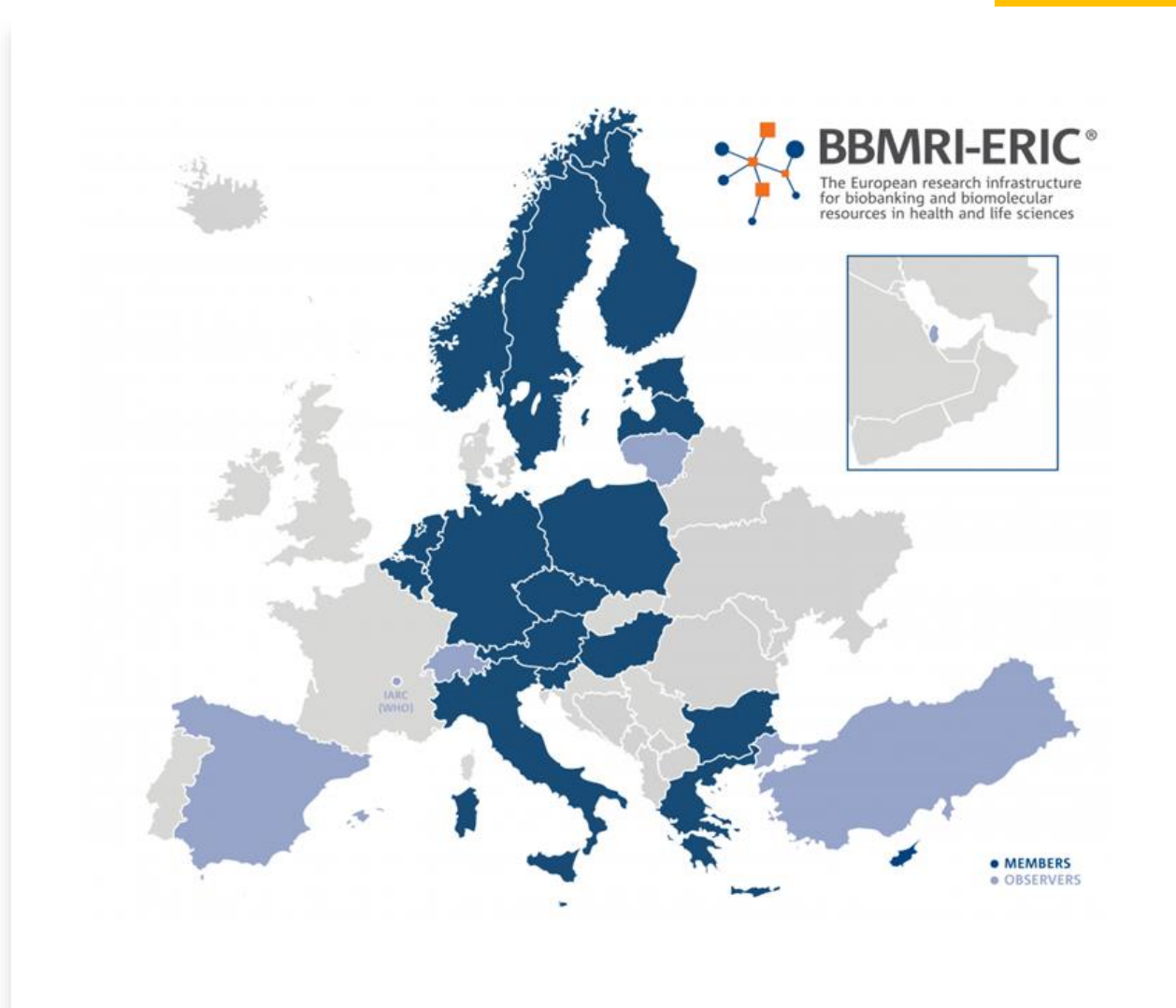


BBMRI

Eiropas pētniecības infrastruktūra biobanku un molekulārās bioloģijas jomās

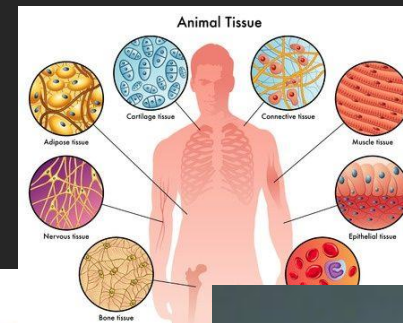
Dr. biol. Vita Rovīte
vita.rovite@biomed.lu.lv



Prezentācijas plāns

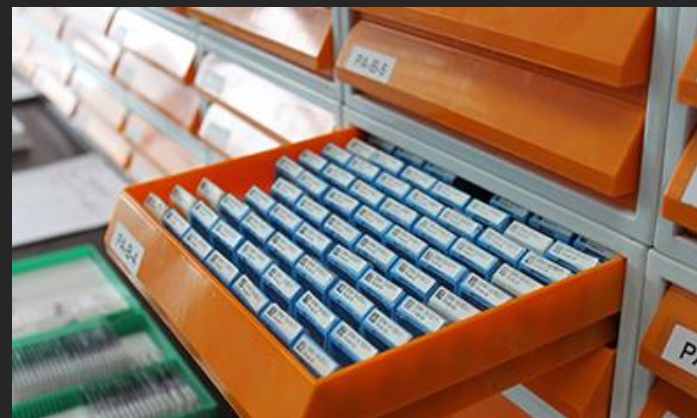
- ✓ Kas biobankas un kāpēc tās ir svarīgas?
- ✓ BBMRI-ERIC un aktivitātes
- ✓ BBMRI.Latvija darbība

Kas ir biobanka?



Biobankas ir dažādas

PĒTNIECISKĀS BIOBANKAS



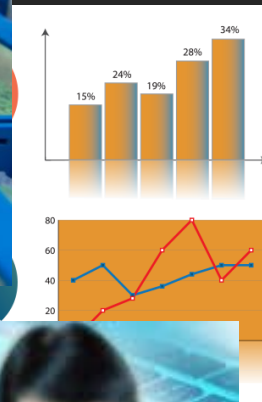
Zinātniskā pētniecība



SPERMAS/ OLŠŪNU BANKAS
Reproduktīvā medicīna

NABAS SAITES CILMES ŠŪNU BANKAS
Terapija nākotnē

Kāpēc vajag biobanku?



Annual Special Issue

TIME

10 IDEAS CHANGING THE WORLD RIGHT NOW

The global economy is being remade before our eyes. Here's what's on the horizon

- WHY YOUR JOB IS YOUR MOST VALUABLE ASSET
- REPURPOSING THE SUBURBS
- SURVIVAL-STORE SHOPPING
- BIOBANKS: SAVING YOUR PARTS
- NEED LAND? RENT A COUNTRY
- THE NEW CALVINISM
- ECOLOGICAL INTELLIGENCE
- AMORTALITY: FOREVER YOUNG
- AFRICA: OPEN FOR BUSINESS
- REINVENTING THE HIGHWAY

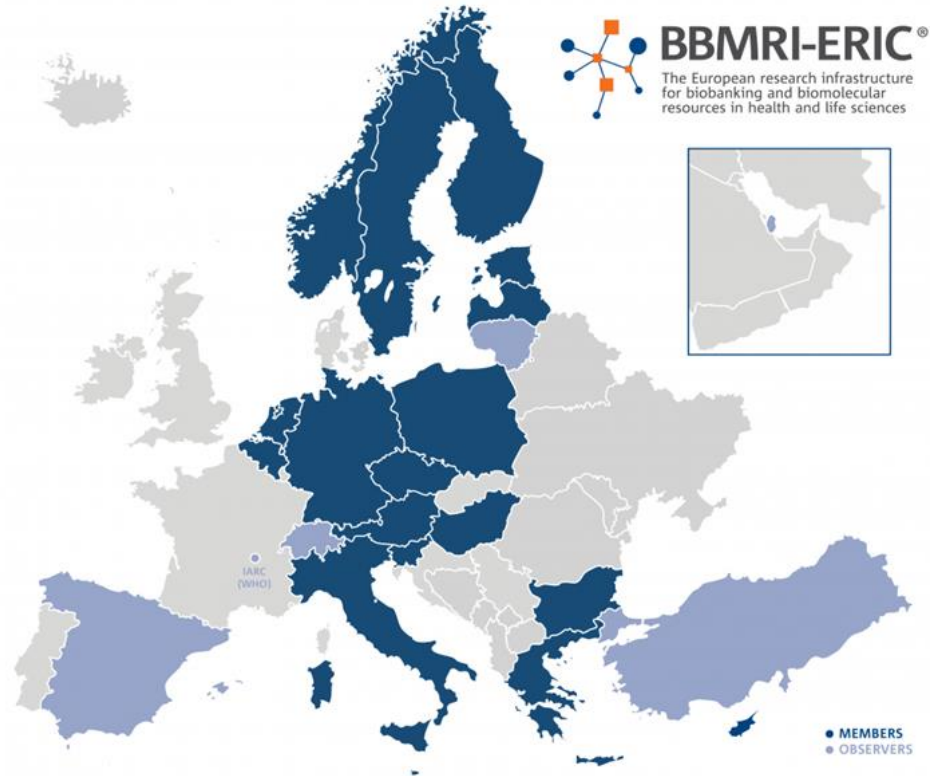
BIOBANKA

Izpratne, ka biobankas ir jāveido standartizētā un harmonizētā veidā un jāveicina to sadarbība

- ✓ Paraugu kvalitāte
- ✓ Izmaksu pārvaldība
- ✓ Rezultātu atkārtojamība
- ✓ Organizācijas, kas veicina biobanku salāgojamības un sadarbības procesus, PHOEBE, BBMRI-ERIC, ISBER un citi

Chalmers et al.

Eiropas biobanku infrastruktūra *BBMRI-ERIC*



- BBMRI-ERIC mērķis ir **nodrošināt bioloģisko paraugu resursus pētnieciskām vajadzībām**, lai sekmētu **sabiedrības veselības uzlabošanu**
- Valsts iedzīvotāju genoma datubāze ir Latvijas nacionālais mezgls BBMRI-ERIC

Ētika un likumdošana



IT risinājumi

Kvalitātes vadība

Galvenie
BBMRI-ERIC
darbības
virzieni

Kvalitātes vadība

- Resursu nodrošināšana
- Pieredzes apmaiņa
- Apmācības
- Ekspertu darba grupas



Home - Services & Support - Quality Management

FIND SAMPLES AND DATA

ABOUT ▾

SERVICES & SUPPORT ▾

EU GRAI

BBMRI-ERIC QUALITY MANAGEMENT SERVICES FOR BASIC AND APPLIED RESEARCH



KNOWLEDGE HUB

Find everything you need to know about quality management in biobanking and biomedical research in one place: The BBMRI.QM Knowledge Hub consists of a pool of experts that can help you with any of the following:

- [BBMRI-ERIC liaisons with international standardization organizations](#)
- [International standards relevant for biobanking and biomedical research](#)
- [Quality management tasks in EU projects](#)
- [Biobanking in times of COVID-19 Recordings available!](#)
- [Working Group QMS](#)
- [Meet the QM Team](#)

Consultation Hours:

- [BBMRI.QM Newsroom](#)

QM Documents:

- [BBMRI-ERIC User satisfaction survey](#)



TRAINING & SUPPORT

Whether you are looking for training opportunities or practical support with your quality management – quality experts can provide you with a solution tailored to your needs.

Within the BBMRI.QM network, we offer in-house and online training, university courses, summer schools, short courses, workshops, and consulting services covering different quality management systems:

BBMRI.QM Training & Education Programmes:

- [Training series about molecular in vitro diagnostic examinations – specifications for pre-examination processes Recordings available!](#)
- [Training series about the biobanking standard ISO 20387:2018 Recordings available!](#)
- [Training session on ISO 23494-1:2023 – Biotechnology – Provenance information model for biological material and data NEW](#)

BBMRI.QM Academy:

- [What is the BBMRI.QM Academy?](#)



AUDITING

If you run a non-certified biobank and/or you want to know if the samples stored fulfill certain quality requirements, get the support of BBMRI.QM. We offer peer-review-style audits on request. Take the next QM improvement step together with us!

Process flow: From the SAS to a Quality Label in the BBMRI-ERIC Directory

Step 1: Assess your processes with the BBMRI-ERIC Self-Assessment Survey (BBMRI-ERIC SAS).

- [What is the BBMRI-ERIC SAS?](#)
- [Short explanation about access principles to the BBMRI-ERIC SAS](#)
- [Request the BBMRI-ERIC SAS](#)

Step 2: Request a BBMRI-ERIC audit

- [BBMRI-ERIC Audit](#)

Step 3: A positive audit will lead to a Quality Label in the Directory

- [Quality Label in the BBMRI-ERIC Directory](#)



QUALITY ASSURANCE

Task Force on Quality Assurance Markers to define and provide biomarkers (intrinsic/ extrinsic) that allow standardized assessment of sample quality through engagement in biospecimen research.

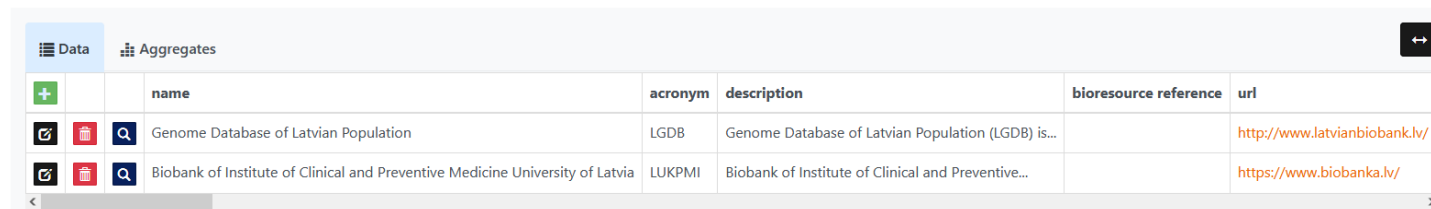
Applying such biomarkers will allow pooling of samples of comparably high-quality EU-wide and beyond while fostering large-scale cohort studies e.g., on cancer, rare diseases, paediatrics, and COVID-19/infectious diseases. We will focus on liquid biopsy samples due to their increasing clinical significance.

The TF is based on in-kind contributions by staff of BBMRI-ERIC National Nodes, affiliated biobanks & partners and/or BBMRIERIC Expert Centres – so it is open for the wider BBMRI community to join!

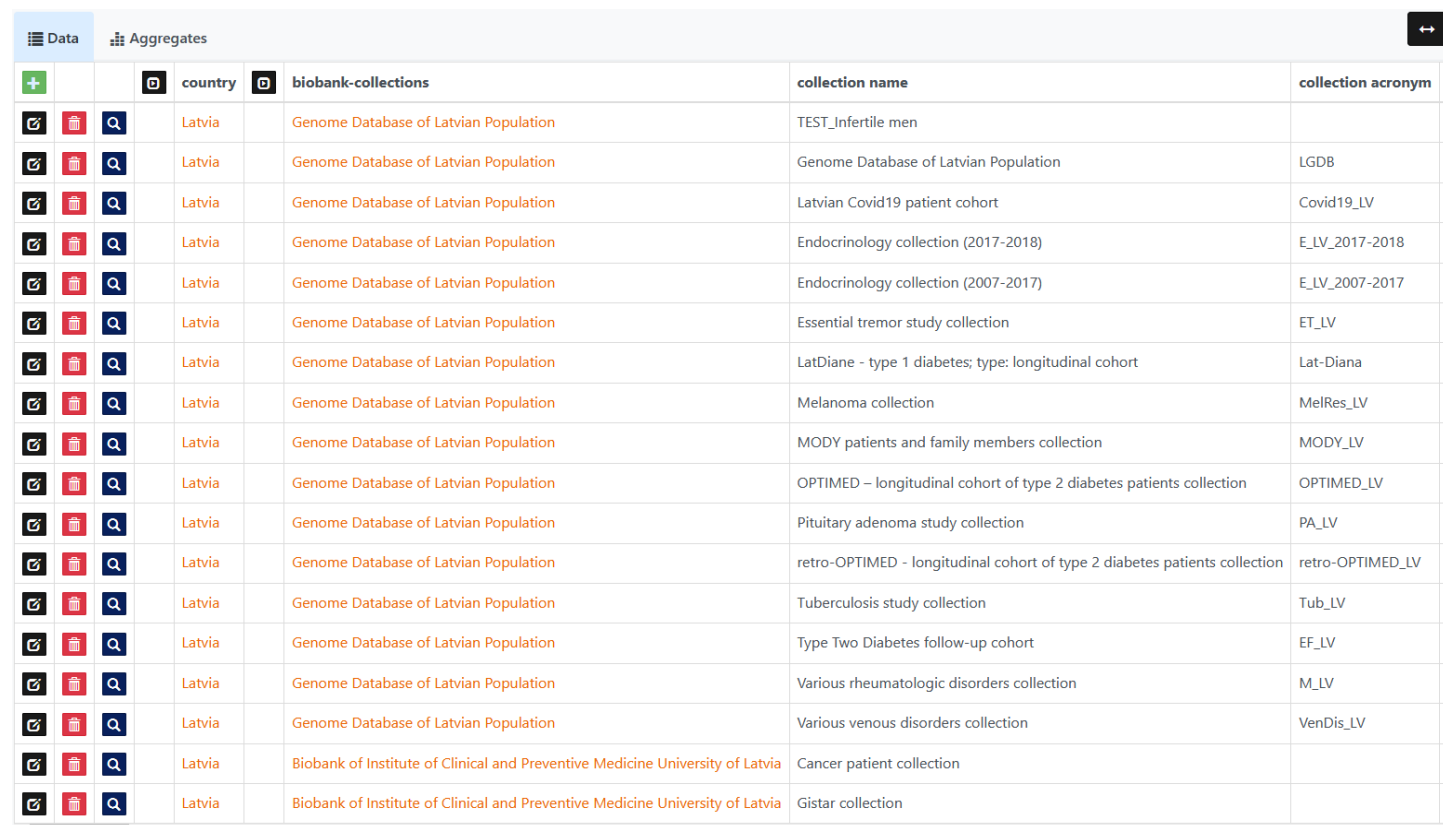
IT risinājumi

- Biobanku *Directory*
- Rīki paraugu meklēšanai *Locator/Negotiator*
- Nomenkulatūras: *MIABIS*
- Agregētu datu/biobanku reprezentācijas rīki

BBMRI-Finder



	name	acronym	description	bioresource reference	url
	Genome Database of Latvian Population	LGDB	Genome Database of Latvian Population (LGDB) is...		http://www.latvianbiobank.lv/
	Biobank of Institute of Clinical and Preventive Medicine University of Latvia	LUKPMI	Biobank of Institute of Clinical and Preventive...		https://www.biobanka.lv/



	country	biobank-collections	collection name	collection acronym
	Latvia	Genome Database of Latvian Population	TEST_Infertile men	
	Latvia	Genome Database of Latvian Population	Genome Database of Latvian Population	LGDB
	Latvia	Genome Database of Latvian Population	Latvian Covid19 patient cohort	Covid19_LV
	Latvia	Genome Database of Latvian Population	Endocrinology collection (2017-2018)	E_LV_2017-2018
	Latvia	Genome Database of Latvian Population	Endocrinology collection (2007-2017)	E_LV_2007-2017
	Latvia	Genome Database of Latvian Population	Essential tremor study collection	ET_LV
	Latvia	Genome Database of Latvian Population	LatDiane - type 1 diabetes; type: longitudinal cohort	Lat-Diana
	Latvia	Genome Database of Latvian Population	Melanoma collection	MelRes_LV
	Latvia	Genome Database of Latvian Population	MODY patients and family members collection	MODY_LV
	Latvia	Genome Database of Latvian Population	OPTIMED – longitudinal cohort of type 2 diabetes patients collection	OPTIMED_LV
	Latvia	Genome Database of Latvian Population	Pituitary adenoma study collection	PA_LV
	Latvia	Genome Database of Latvian Population	retro-OPTIMED - longitudinal cohort of type 2 diabetes patients collection	retro-OPTIMED_LV
	Latvia	Genome Database of Latvian Population	Tuberculosis study collection	Tub_LV
	Latvia	Genome Database of Latvian Population	Type Two Diabetes follow-up cohort	EF_LV
	Latvia	Genome Database of Latvian Population	Various rheumatologic disorders collection	M_LV
	Latvia	Genome Database of Latvian Population	Various venous disorders collection	VenDis_LV
	Latvia	Biobank of Institute of Clinical and Preventive Medicine University of Latvia	Cancer patient collection	
	Latvia	Biobank of Institute of Clinical and Preventive Medicine University of Latvia	Gistar collection	

ELSI resursi

- Resursi ELSI biobanku jomā
- Apmācības
- Konsultācijas
- GDPR – *code of conduct*

ELSI SERVICES & RESEARCH



RESEARCH

We conduct research relating to ethical, legal and societal issues (ELSI). This is fundamental to staying up to date with and contributing knowledge to our services and training.

- [EU Projects](#)
- [Publications, impact and outreach](#)



SERVICE

We support the biobanking and life science RI communities by facilitating compliance with regulatory requirements and best practice standards.

- [ELSI Helpdesk](#)
- [ELSI Knowledge Base](#)
- [Ethics Check](#)



TRAINING

We provide training and workshops on ELSI issues such as Data Protection Impact Assessment (DPIA), ethical compliance and social engagement, among others.

- [ELSI Events](#)
- [ELSI Dialogues](#)
- [ELSI Podcasts](#)

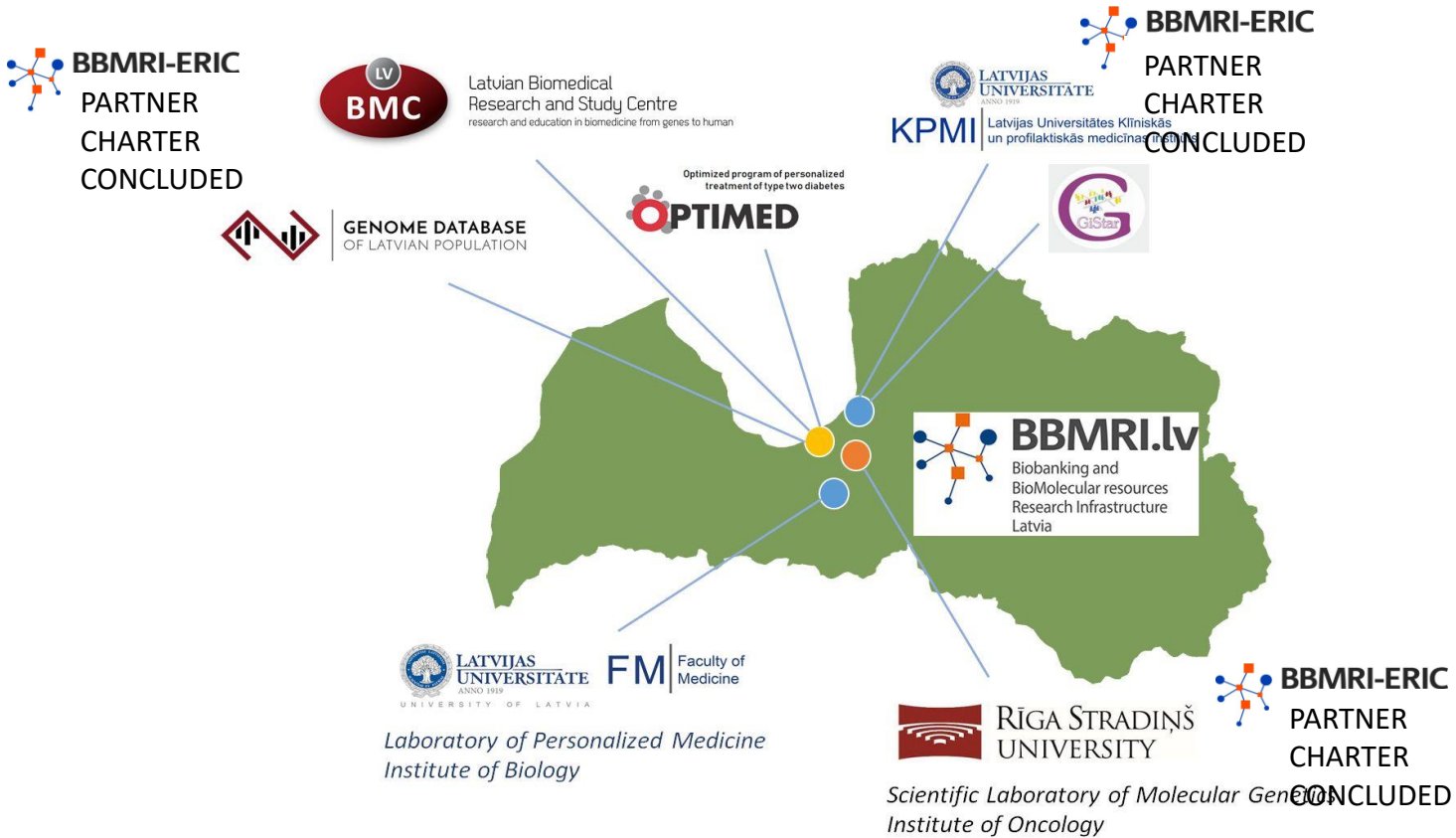
WATCH OUR VIDEO





Latvijas Nacionālais Biobanku tīkls

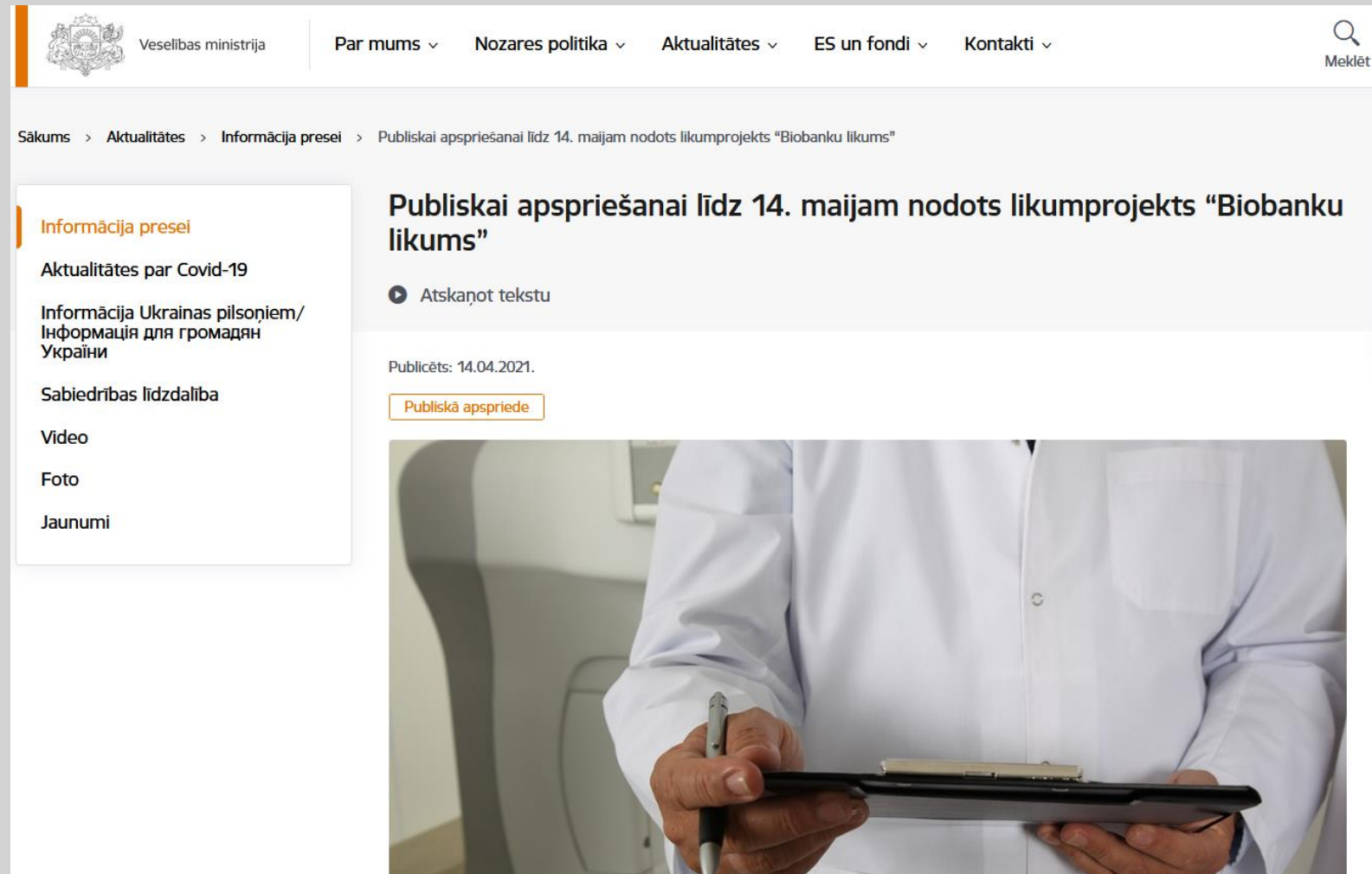
BBMRI.Latvia



BIOBANKU LIKUMMODŠANA

Pašlaik, biobanku veidošanas aspektus Latvijā nosedz vairāki novecojuši normatīvie akti

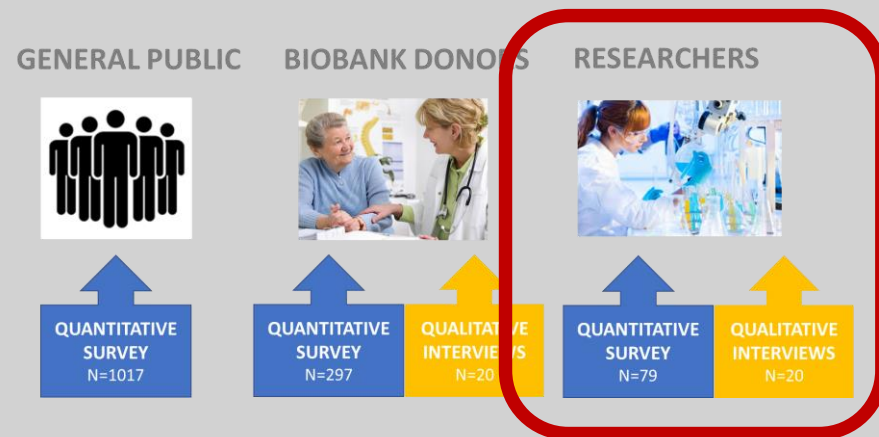
Ir izveidots jauns biobanku likums un akūti nepieciešama tā stāšanās spēkā



The screenshot shows the official website of the Ministry of Health of Latvia. The header includes the coat of arms and the text 'Veselības ministrija'. Navigation links include 'Par mums', 'Nozares politika', 'Aktualitātes', 'ES un fondi', and 'Kontakti'. A search icon and the word 'Meklēt' are in the top right corner. The breadcrumb trail reads: 'Sākums > Aktualitātes > Informācija presei > Publiskai apspriešanai līdz 14. maijam nodots likumprojekts "Biobanku likums"'. The main content area features a sidebar with 'Informācija presei' and sub-links for 'Aktualitātes par Covid-19', 'Informācija Ukrainas pilsoņiem / Інформація для громадян України', 'Sabiedrības līdzdalība', 'Video', 'Foto', and 'Jaunumi'. The main article title is 'Publiskai apspriešanai līdz 14. maijam nodots likumprojekts "Biobanku likums"', with a sub-link 'Atskaņot tekstu'. The publication date is 'Publicēts: 14.04.2021.' and there is a 'Publiskā apspriede' button. Below the text is a photograph of a person in a white lab coat holding a clipboard and a pen.

LATVIJAS BIOBANKU VAJADZĪBAS

- Zinātnieki norādīja uz to, ka viņiem **pietrūkst informācijas par sadarbības iespējām ar biobankām**;
- **Būtiskākie faktori sadarbībai ar biobankām: paraugu un datu kvalitāte, ātrs izsniegšanas laiks, atbilstība ētikas principiem, zemas izmaksas, konsultācijas par biobanku pakalpojumiem**;
- Daļa zinātnieku uzskata, ka biobanku darbība Latvijā ir fragmentēta un **nepieciešams vienots Latvijas biobanku katalogs un vietēja mērroga sadarbības veidošana**;
- Daļa zinātnieku izteica vēlmi izveidot **specifisku komunikācijas garba grupu biobanku jomā Latvijā**, lai organizētu sistemātisku sabiedrības informēšanu.



Ētiski un sociāli atbildīga pētniecības biobanku pārvaldība Latvijā: sabiedrības, donoru un zinātnieku viedokļu analīze



Latvian Biomedical Research and Study Centre
research and education in biomedicine from genes to human



Prof. Signe Mežinska

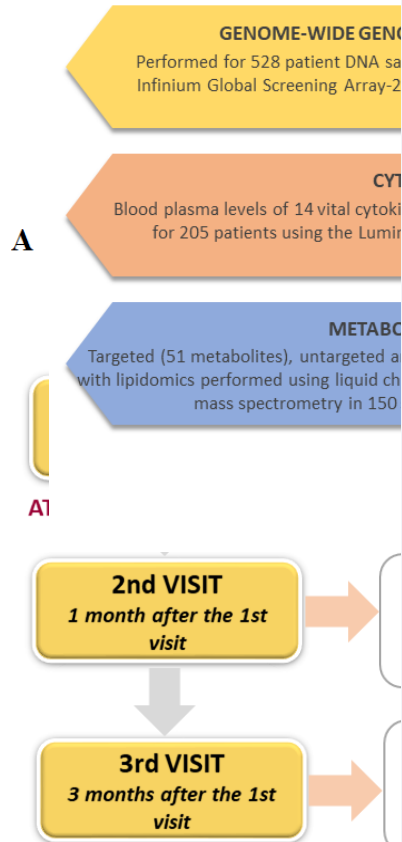
COVID-19 biobanka un "omikas"












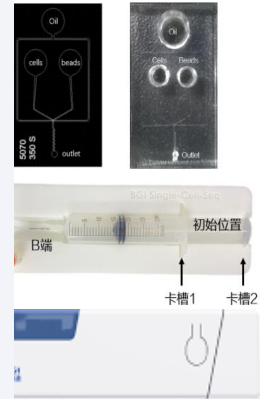
GENOME DATABASE
OF LATVIAN POPULATION



RĪGAS STRADIŅA
UNIVERSITĀTE



 <p>LATVIAN BIOMEDICAL RESEARCH AND STUDY CENTRE</p> <p>COVID-19 Metabolite dataset</p> <p>The dataset contains metabolite levels in blood serum samples of Covid-19 patients. The dataset is developed in the framework of the National Research Programme of Latvia to Mitigate Consequences of COVID-19, Project No. VPP-COVID-2020/1-0016</p> <p>COVID</p> <p>0 data items Everyone </p>	 <p>LATVIAN BIOMEDICAL RESEARCH AND STUDY CENTRE</p> <p>COVID-19 Whole-blood transcriptome dataset</p> <p>The dataset contains RNA-Seq data of peripheral blood cells obtained from Covid-19 patients. The dataset is developed in the framework of National Research Programme of Latvia to Mitigate Consequences of COVID-19, Project No. VPP-COVID-2020/1-0016</p> <p>COVID</p> <p>0 data items Everyone </p>	 <p>LATVIAN BIOMEDICAL RESEARCH AND STUDY CENTRE</p> <p>Biobank: biosamples, sequenced data, survey</p> <p>The dataset contains about 58000 records on more than 2000 different ICD codes.</p> <p>ICD Markers Survey ...</p> <p>58000 data items Everyone </p>
 <p>LATVIAN BIOMEDICAL RESEARCH AND STUDY CENTRE</p> <p>COVID-19 Gut microbiome dataset</p> <p>The dataset contains metagenomic shotgun sequencing data of the stool DNA collected from Covid-19 patients. The dataset is developed in the framework of the National Research Programme of Latvia to Mitigate Consequences of COVID-19, Project No. VPP-COVID-2020/1-0016</p> <p>COVID</p> <p>0 data items Everyone </p>	 <p>LATVIAN BIOMEDICAL RESEARCH AND STUDY CENTRE</p> <p>COVID-19 Oral microbiome dataset</p> <p>The dataset contains 16S rRNA gene sequencing data of the DNA extracted from oropharyngeal swabs of Covid-19 patients. The dataset is developed in the framework of the National Research Programme of Latvia to Mitigate Consequences of COVID-19, Project No. VPP-COVID-2020/1-0016</p> <p>COVID</p> <p>0 data items Everyone </p>	 <p>LATVIAN BIOMEDICAL RESEARCH AND STUDY CENTRE</p> <p>COVID-19 Genotyping dataset</p> <p>The dataset contains genotyping data of Covid-19 patients obtained using Infinium Global Screening Array-24 v3.0 BeadChip, which combines 654027 variants with established disease associations, relevant pharmacogenomics markers, and curated exonic content based on ClinVar, NHGRI, PharmGKB, and ExAC databases. The dataset is developed in the framework of the National Research Programme of Latvia to Mitigate Consequences of COVID-19, Project No. VPP-COVID-2020/1-0016</p> <p>COVID</p> <p>0 data items Everyone </p>
 <p>LATVIAN BIOMEDICAL RESEARCH AND STUDY CENTRE</p> <p>COVID-19 blood biochemistry dataset</p> <p>The dataset contains levels of biochemical measures in blood samples collected from Covid-19 patients. The dataset is developed in the framework of the National Research Programme of Latvia to Mitigate Consequences of COVID-19, Project No. VPP-COVID-2020/1-0016</p> <p>COVID</p> <p>0 data items Everyone </p>	 <p>LATVIAN BIOMEDICAL RESEARCH AND STUDY CENTRE</p> <p>COVID-19 Cytokine dataset</p> <p>The dataset contains cytokine levels detected in blood plasma samples of Covid-19 patients. The dataset is developed in the framework of the National Research Programme of Latvia to Mitigate Consequences of COVID-19, Project No. VPP-COVID-2020/1-0016</p> <p>COVID</p> <p>37 data items Everyone </p>	 <p>LATVIAN BIOMEDICAL RESEARCH AND STUDY CENTRE</p> <p>COVID-19: Clinical dataset</p> <p>Clinical meta-data set describing patients cohort admitted to the hospital. Dataset is represented as a part of the National Research Initiative of the Republic of Latvia, Project No. VPP-COVID-2020/1-0016</p> <p>COVID</p> <p>1 data items Everyone </p>

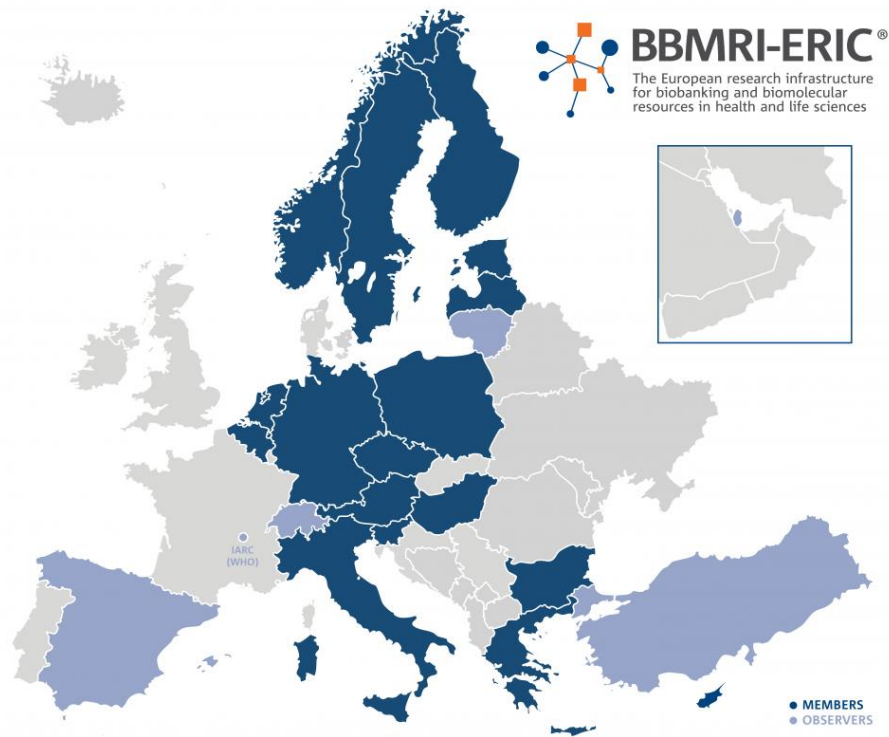


Publiskās aktivitātes

- Ikgadējs biobanku seminārs
- Kursi par biobanku tēmu
- Izglītojošas aktivitātes
- Sadarbība nacionālā un starptautiskā līmenī



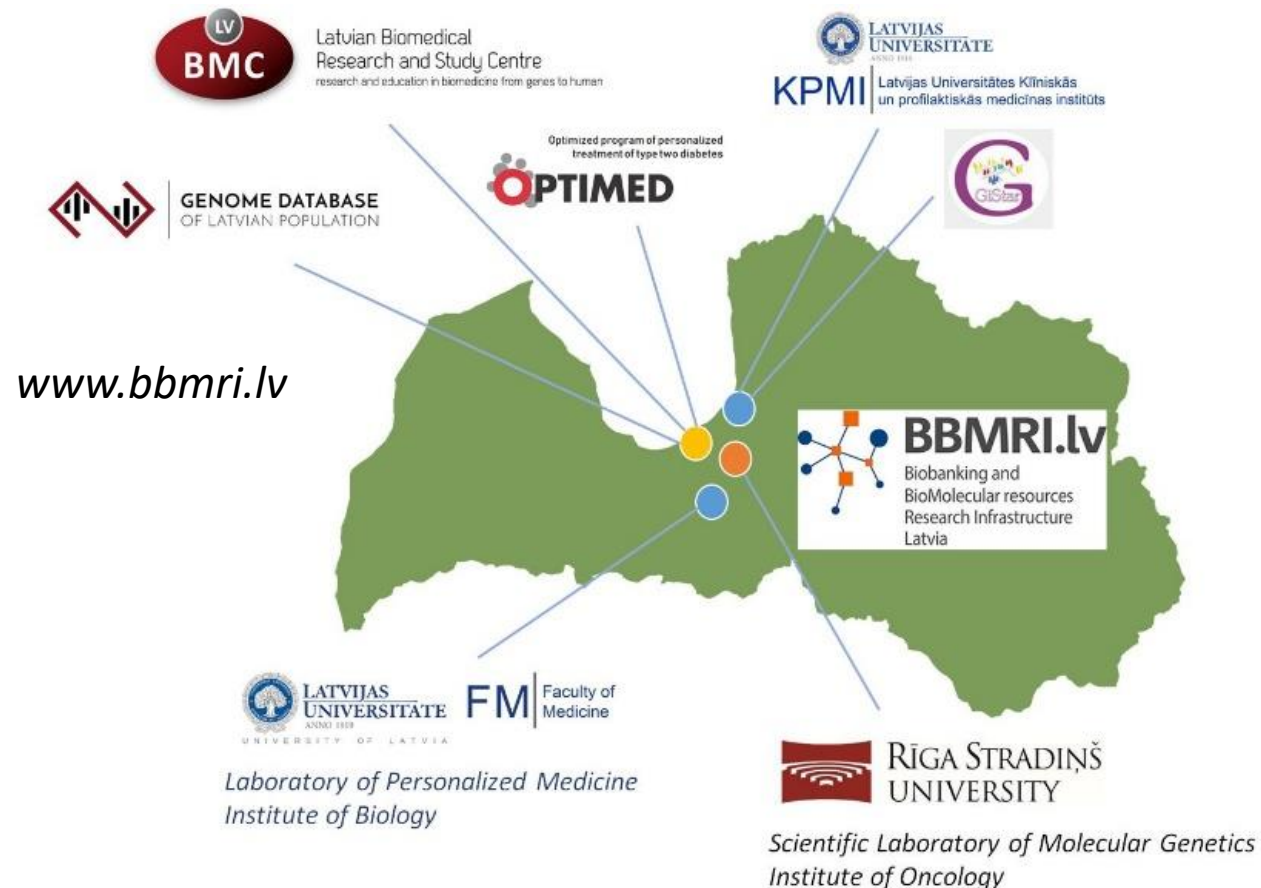
BBMRI-ERIC Eiropas Biobanku infrastruktūra



BBMRI-ERIC®
The European research infrastructure for biobanking and biomolecular resources in health and life sciences



Latvijas Biobanku tīkls



BBMRI.LV komunikācija

Epasts un aktuālās informācijas pārsūtīšana

bbmri.lv@biomed.lu.lv

!!! Ja ir vēlšanās pievienoties, rakstiet mums !!!