

## FIBOK2024 PROGRAM

04.04.2024.

Registration (8:30-9:30)

### Opening ceremony

9:40	9:45	Jenő KONTSCHÁN	HUN-REN ATK director general	
9:45	9:50	Magda PÁL	HUN-REN ATK MGI Chair of the Organizing Committee	
<b>Plant- and food biotechnology 1. section : Chair Person – László SÁGI (HUN-REN, ATK MGI)</b>				
9:50	10:20	Tibor JANDA ( <i>invited speaker</i> )	HUN-REN ATK MGI	Beware of the dwarf! Or not?
10:20	10:35	Dávid KISS-LEIZER	MATE NTTI	PGP trait examination of six osmotolerant, soil-born bacterial strains from different genera
10:35	10:50	Kalpita SINGH	HUN-REN ATK MGI	Redox modulation of hormones and metabolites in maize
10:50	11:00	Zita SEPSI	Association of Hungarian Biotechnology Students	Introduction of the Hungarian Biotechnology Students Association (MaBE)

Caffee break (11:00 - 11:30)

### Plant- and food biotechnology 2. section : Chair Person – László SÁGI (HUN-REN, ATK MGI)

11:30	12:00	Györgyi FERENC ( <i>invited speaker</i> )	HUN-REN SZBK	Oligonucleotide-directed gene-specific mutagenesis: transgene-free genome editing
12:00	12:15	Almash JAHAN	MATE NVI	Apple luteovirus P0 protein is a suppressor of local and systemic RNA silencing
12:15	12:30	Jeny JOSE	HUN-REN ATK MGI	Role of miR396 in regulating plant defense mechanisms against pathogens: insights from CRISPR/CAS9 editing in potato
12:30	12:45	Fanni SZABADOS	HUN-REN ATK MGI	The role of dna demethylase demeter (DME) in regulating the methylation pattern of male and female reproductive tissues of barley
12:45	13:00	Rebeka PAPP	SZTE TTIK BI	Heterologous production of a <i>Solanum lycopersicum</i> L. antifungal defensin in <i>Pichia pastoris</i>

LUNCH (13:00-14:30)

### Poster presentations : Chair Persons – Éva VÁRALLAY (MATE NVI) and Elen GÓCZA (MATE GBI)

14:30	14:33	Katalin BODOR	ICDCRM	Examination of different types of potato characteristics and analysis of starch structure
14:33	14:36	Éva DOBÓVÁRI	MATE GBI GGT	Polymorphism analysis of apricot ( <i>Prunus armeniaca</i> L.) genotypes with scot markers
14:36	14:39	Vivien FÁKÓ	MATE NVI	Identification of silencing suppressor proteins encoded by <i>Prunus</i> virus F
14:39	14:42	Borbála GRÓB	MATE NVI	First detection of rubus yellow net virus on raspberries in Hungary
14:42	14:45	Lilla PÉRI	MATE NVI	Common milkweed as a virus reservoir
14:45	14:48	Mirella HIRTH	MATE HAKI	Sexing of zebrafish by genes differentially expressed in the tail fin
14:48	14:51	Alexandra TOKÁR	MATE ÁTI	Intraindividual variance of bull sperm morphometry parameters and their relation with field fertility
14:51	14:54	Arnold TÓTH	MATE GBI ÁBT	Investigating the effect of heat treatment and monitoring the molecular changes in primordial germ cells (PGC) before and after freezing
14:54	14:57	Martin URBÁN	MATE GBI ÁBT	The effects of X-chromosome inactivation in mouse embryonic gonads
14:57	15:00	Szilárd GUDOR	MOGYE GYK	Protein A affinity chromatography of biosimilar nivolumab monoclonal antibody from chinese hamster ovary (CHO) cell culture broths
15:00	15:03	Maria SALINAS	MATE GBI ÁBT	Non-invasive assessment of the quality and viability of rabbit embryos
15:03	15:06	Éva MOUSSONG	ELTE TTK BI	Effects of calcium fluoride nanoparticles on the amyloid formation and cytotoxicity of Alzheimer's amyloid
15:06	15:09	Márton Péter NYIRI	ELTE TTK BI	Investigation of the effect of nanomaterials on the structure of amyloidogenic proteins.
15:09	15:12	Otilia TÓTH	HUN-REN TTK	Expression of dUTPase in mouse postnatal development
15:12	15:15	Anna ZRINYI	BME VBK SZKTT	Investigation and optimization of immobilization of histidine-tagged enzymes
15:15	15:18	Tünde GAIZER	PPKE ITK	Agent-based modeling of yeast communities under non-standard environmental conditions
15:18	15:21	Lilla SÁNDOROVÁ	MATE GBI GGT	T-ARMS PCR application for SNP detection in Holstein-Friesian cattle of A1 and A2 β-casein
15:21	15:24	Vivien BÍRÓ	DE TTK BTI	Manganese effect on citric acid production by <i>Aspergillus niger</i> : unlocking an efficiency boosting hidden key
15:24	15:27	Susana ARAUJO NAVAS	MATE	Preliminary results of bacterial community diversity in the rhizosphere of dragon fruit
15:27	15:30	Fruzsina FÉLEGYHÁZI	ELTE TTK BI	Investigation of soil biodiversity in alkaline grassland under regenerative agricultural practice
15:30	15:33	Valentina MADÁR	PPKE ITK	Exploring directed and multicellular growth of yeast
15:33	15:36	Péter FUTÓ	MATE GBI MABT	Ecophysiological characterisation of a <i>Klebsormidium</i> strain isolated from a cave environment
15:36	15:39	Richárd MERBER	SZTE TTIK BI	Heterologous expression and characterisation of <i>Neosartorya</i> ( <i>Aspergillus</i> ) <i>fischeri</i> bubble protein

Caffee break (15:45 - 16:15)

Poszter szekció (16:15-18:00)

GALA DINNER (18:00 - 21:00)

04.05.2024.

### Medical and pharmacological biotechnology section : Chair Person – László HIRIPI (MATE GBI)

10:00	10:30	Edit BÚZÁS ( <i>invited speaker</i> )	SE ÁOK	Biological roles and exploitation potential of extracellular vesicles
10:30	10:45	Zsófia BOROS	ELTE TTK BI	Xenorhabdus antimicrobial products: genetic regulation of biosynthesis and perspectives of application
10:45	11:00	Dorottya Katalin HAJDÚ	BME VBK SZKTT	Development of chemometric models for raman spectroscopy-based monitoring and control of mammalian cell cultivations
11:00	11:15	Nikolett NAGY	HUN-REN TTK	Investigation of dUTPase expression in mouse adult neurogenesis
11:15	11:30	Zsófia Sára TÓTH	HUN-REN TTK MÉI	Investigation of proteinaceous inhibition of <i>M. tuberculosis</i> dUTPase
11:30	11:35	Gyula CSANÁDI	BIOCENTER Kft.	Komplex biotechnológiai megoldások a Biocenter Kft-től

Caffee break (11:35 - 12:00)

### Microbial biotechnology section : Chair Person - Tünde PUSZTAHELYI (DE, MÉK)

12:00	12:30	Miklós GYURANEZC ( <i>invited speaker</i> )	HUN-REN ÁTKI	Development of novel methods for the control of Mycoplasma infections
12:30	12:45	Dóra BALÁZS	SZTE TTIK BI	Comprehensive investigation of bioactive peptaibols and their preparation for future agricultural application
12:45	13:00	Alexandra MÁRTON	DE TTK BTI	Insights into the evolution and mutations of second alternative oxidase genes in <i>Aspergillaceae</i>
13:00	13:15	Zsófia BOROS	ELTE TTK BI	Xenorhabdus antimicrobial products: genetic regulation of biosynthesis and perspectives of application
13:15	13:30	Fatma ELZHAA	MATE ÉTTI	Incidence and antibiotic resistance of <i>Salmonella enterica</i> strains isolated from different types of egyptian cheeses

LUNCH (13:30-14:45)

### Bioinformatics section : Chair person - Orsolya Ivett HOFFMANN (MATE GBI)

14:45	15:15	Bence GÁLIK ( <i>invited speaker</i> )	PTE SZKK	The need of reference genomes and transcriptomes - the fundation of basic research
15:15	15:30	Esther Ijoma IDOGWU	MATE GBI MABT	Studying the response of phytophthora infestations inoculation in different potato cultivars by a transcriptomic approach
15:30	15:45	Regina MARTINEK	HUN-REN TTK MÉI	Assessment of the mutagenic effect of probably carcinogenic pesticides using a whole genome sequencing approach
15:45	16:00	Ákos ROZSNYÓI	SZTE TTIK BI	Peptaibiotics: navigating biotechnological frontiers with the universal peptaibol database

Caffee break (16:00 - 16:30)

### Animal biotechnology section : Chair person - Elen GÓCZA (MATE GBI)

16:30	17:00	Nándor NAGY ( <i>invited speaker</i> )	SE ÁOK	Bird's eye perspective of enteric nervous system development: Lessons from the avian embryo
17:00	17:15	Lilla BODROGI	MATE GBI ÁBT	Identifying the novel role of NADPH oxidase 4 in the biotransformation of T2 mycotoxin
17:15	17:30	András ECKER	MATE GBI ÁBT	Creating FUCCI-expressing chicken primordial germ cell lines for the analysis of the cell cycle
17:30	17:45	Dániel PÉTER	MATE HAKI	Digital PCR analysis of growth related genes in african catfish ( <i>Clarias gariepinus</i> ) lines
17:45	18:00	Olivér Máté SZABÓ	MATE HAKI	A transparent zebrafish reporter line for improved visualization of gonad transformation

Announcement of results 18:00- (Elen GÓCZA and Magda PÁL)