

PROGRAMME
of the

**19th International Congress
of the
Hungarian Society for Microbiology**

Organized
by the

Hungarian Society for Microbiology,
the
Faculty of Science, Eötvös Loránd University,
and the
Foundation of the Hungarian Society for Microbiology

Eötvös Conference in Science

Eötvös Loránd University
Budapest, Hungary
July 5-7, 2023

Programme at a glance

Tuesday, July 4	16.00-19.00	Registration
Wednesday, July 5	8.00-17.00	Registration
	Kitaibel Pál Lecture Theatre	
	10.30-11.00	Opening Ceremony
	11.00-12.00	Manninger Memorial Session
	12.00-14.00	Lunch break
	Kitaibel Pál Lecture Theatre	
	14.00-17.00	François Jacob Plenary Session – Multiomics approaches to reveal microbial function and synthetic “microbiology”
	18.30-	Facultative Evening Programme – Guided Tour in the House of Music Hungary and Dinner in the Restaurant „Millennium Háza”
Thursday, July 6	8.00-13.00	Registration
	Szabó József Auditorium	
	9.00-11.00	Antonie van Leeuwenhoek Semi- plenary Session
	11.30-12.25	Károly Schilberszky Agricultural and Food Microbiology Short (Poster) Presentations
	12.25-14.00	Lunch break
	Szabó József Auditorium	
	14.00-14.30	Alfred Hershey Bacteriology and Virology Short (Poster) Presentations
	15.00-16.15	Károly Schilberszky Agricultural and Food Microbiology Oral Presentations
	18.00-	Banquet Dinner in the Hemingway Restaurant
	Lóczy Lajos Auditorium	
	9.00-11.00	Agostino Bassi Semi-plenary Session
	11.30-12.15	Miklós Olgyay Mycology Short (Poster) Presentations
	12.20-14.30	Lunch Break
	Lóczy Lajos Auditorium	
	14.30-16.00	Miklós Olgyay Mycology Oral Presentations

	18.00-	Banquet Dinner in the Hemingway Restaurant
Friday, July 7	8.00-10.00	Registration
	Szabó József Auditorium	
	8.30-10.30	Edward Jenner Semiplenary Session
	10.30-11.00	Coffee break
	11.00-12.30	Daniel Carleton Gajdusek Virology Oral Presentations
	13.00-	Closing Sentences, and Farewell Drink
	Lóczy Lajos Auditorium	
	8.00-9.30	Nándor Gimesi Environmental Microbiology and Biotechnology Oral Presentations
	10.00-11.15	Selman Abraham Waksman Bacteriology Oral Presentations
	11.45-12.25	Nándor Gimesi Environmental Microbiology and Biotechnology Short (Poster) Presentations
	13.00-	Closing Sentences, and Farewell Drink

Detailed Programme

Wednesday, July 5

Kitaibel Pál Lecture Theatre (0-823)

10.30 Opening Ceremony

Welcome Addresses of

József Kónya
President of the Hungarian Society for Microbiology

Károly Márialigeti
Past President of the Hungarian Society for Microbiology

Imre Kacskovics
Dean, Faculty of Science, Eötvös Loránd University

11.00-12.00 Rezső Manninger Memorial Session

Manninger, Rezső (1890-1970), Hungarian veterinarian, an outstanding scholar of veterinary microbiology and epidemiology. He became famous for discovering animal disease causing viruses, and for the elaboration of effective preventive measures for different epidemic veterinary diseases. President of the Hungarian Society for Microbiology from 1958-1967. HSM founded the Rezső Manninger Memorial Medal in 1973.

Chairpersons: József Kónya and Andrea Borsodi

Manninger Lecture

11.00-11.30

ORSOLYA DOBAY

ASYMPTOMATIC CARRIAGE OF PATHOGENIC BACTERIA

Institute of Medical Microbiology, Semmelweis University, Budapest, Hungary

Lectures in Honor of Joseph Sinkovics

11.30-11.40

MÁRIA TAKÁCS

THE LIFE AND ACHIEVEMENTS OF JOSEPH SINKOVICS

National Public Health Center

11.40-12.00

ZITA RIGÓ¹, ZSUZSANNA MOLNÁR², ÁGNES FARKAS¹, ADRIENNE LUKÁCS¹, MÁRIA TAKÁCS¹, ♦KATALIN SZOMOR¹

MEASLES SEROPREVALENCE AMONG HEALTH CARE WORKERS IN HUNGARY

¹Reference Laboratory for Microbiology; ²Department of Communicable Disease Epidemiology and Infection Control, National Public Health Center, Budapest, Hungary

12.00-14.00 Lunch break

Wednesday, July 5

Kitaibel Pál Lecture Theatre (0-823)

14.00-17.00 François Jacob Plenary Session – Multiomics approaches to reveal microbial function and synthetic “microbiology”

Jacob, François (1920 - 2013), French biologist, Nobel laureate. Jacob was born in Nancy, France, and entered the Lycée Carnot, and then he entered medical school. During the German occupation of France Jacob left France for Great Britain to join the war effort. He was injured in a German air attack. After his recovery, Jacob returned to medical school and began investigating the antibiotic tyrothricin and learning the methods of bacteriology. Became a medical doctor in 1947. For many years, it had been known that bacterial and other cells could respond to external conditions by regulating levels of their key metabolic enzymes, and/or the activity of these enzymes. Jacob together with Jacques Monod, originated the idea that control of enzyme levels in all cells occurs through regulation of transcription. He shared the 1965 Nobel Prize in Medicine with Jacques Monod and André Lwoff. He received other national and international honors and awards, among them in became member of Académie française Seat 38 in 1996.

Chairpersons: Attila Gácsér and Károly Márialigeti

14.00-14.30

FJP-1

TRINAD CHAKRABORTY

RESOLVING COLISTIN RESISTANCE AND HETERORESISTANCE IN ENTEROBACTEREALES

Institute for Medical Microbiology, Justus-Liebig University Giessen, Germany

14.30-15.00

FJP-2

CSABA PÁL

ANTIBIOTICS OF THE FUTURE ARE PRONE TO BACTERIAL RESISTANCE

Biological Research Centre, Szeged, Hungary

15.00-15.30

FJP-3

DAVID BERRY

DETERMINING MICROBIAL NUTRIENT NICHES IN THE GUT

Division of Microbial Ecology, Department of Microbiology and Ecosystem Science Centre for Microbiology and Environmental Systems Science, University of Vienna, Vienna, Austria

15.30-16.00 Coffee break

16.00-16.30

FJP-4

ROBERT DURAN

MICROBIAL ECOLOGY OF CONTAMINATED ENVIRONMENTS

Environment and Microbiology, Université de Pau, Pau, France

16.30-17.00

FJP-5

LEONARDO NIMRICHTER

CANDIDA ALBICANS EXTRACELLULAR VESICLES, THE THREE SIDES OF THE COIN

General Microbiology, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil

17.00-17.30

FJP-6

YUQUAN XU¹, ♦ISTVÁN MOLNÁR²

HACKING: A NOVEL POLYCISTRONIC SYSTEM FOR THE MULTIPLEXED, PRECALIBRATED EXPRESSION OF SECONDARY METABOLITE BIOSYNTHETIC PATHWAYS IN FUNGI

¹The Chinese Academy of Agricultural Sciences and Beijing University of Chemical Technology, Beijing, China; ²VTT Technical Research Centre of Finland, Espoo, Finland

18.30 Facultative Evening Programme – Guided Tour in the House of Music Hungary and Dinner in the Restaurant „Millennium Háza”

Thursday, July 6

Szabó József Auditorium (0-803)

9. 00-11.00 Antonie van Leeuwenhoek Semi-plenary Session

van Leeuwenhoek, Antonie Philips (1632 – 1723), Dutch draper, naturalist - microscopist. A self-taught man in science. Born and raised in Delft, worked as a draper in his youth and founded his own shop in 1654. He became well recognized in municipal politics. Van Leeuwenhoek wanted to see the quality of the thread better than what was possible using the magnifying lenses of the time. He developed an interest in lens making by melting glass spheres, but he also made ground lenses. In the 1670s, he started to explore „microscopic life”. Using his single-lensed „microscopes”, Van Leeuwenhoek was the first to observe Bacteria, and other „diertjes” – animalcules. Van Leeuwenhoek introduced his work to his friend, Reinier de Graaf, a physician, who urged him to send the description of his observations to the Royal Society. By the time Van Leeuwenhoek died, he had written some 190 letters to the Royal Society in a wide variety of fields and altogether approximately 560 letters to the Royal Society and other scientific institutions concerning his observations and discoveries. Though in 1676 his observations on single-celled organisms met with skepticism, he was elected to the Royal Society in 1680. Antonie van Leeuwenhoek made more than 500 optical lenses. He also created at least 25 single-lens „flea glasses”, of differing types, of which only nine have survived. These were small devices, the largest being about 5 cm long. Those that have survived are capable of magnification up to 275 times. It is suspected that Van Leeuwenhoek possessed some „microscopes” that could magnify up to 500 times.

Chairpersons: András Táncsics and István Molnár

9.00-9.30

LSP-1

SIMANG CHAMPARAMARY¹, BORIS INDIC¹, ATTILA SZÜCS², OMAR LANGUAR², FARIDUL K. M. HASAN³, ANDRÁS SZEKERES², CSABA VÁGVÖLGYI², LÁSZLÓ KREDICS², ♦GYÖRGY SIPOS¹

COMPARATIVE GENOMICS AND TRANSCRIPTOMICS ANALYSES CONFIRM THE DISTINCTIVE MYCOREMEDIATION POTENTIAL OF ARMILLARIOID SPECIES

¹Faculty of Forestry, University of Sopron, Sopron; ²Department of Microbiology, Faculty of Science and Informatics, University of Szeged, Szeged; ³Fibre and Nanotechnology Program, Faculty of Wood Engineering and Creative Industries, University of Sopron, Sopron, Hungary

9.30-10.00

LSP-2

♦ROLAND WIRTH^{1,2}, ZOLTÁN BAGI², PRATEEK SHETTY¹, MÁRK SZUHAJ², SALLY CHEUNG², KORNÉL L. KOVÁCS², GERGELY MARÓTI^{1,3}

MACHINE-LEARNING-GUIDED MULTI-OMICS INVESTIGATION OF INDUSTRIAL-SCALE BIOGAS PLANTS REVEALS INTER-KINGDOM INTERACTIONS AND STABILITY OF METHANOGENS

¹Institute of Plant Biology, Biological Research Centre; ²Department of Biotechnology, Faculty of Science and Informatics, University of Szeged, Szeged; ³Faculty of Water Sciences, University of Public Service, Baja, Hungary

10.00-10.30

LSP-3

♦GERGELY MARÓTI, ATTILA FARKAS, PRATEEK SHETTY, BERNADETT PAP

INTER-KINGDOM INTERACTIONS WITHIN NATURAL AND SYNTHETIC ALGAL-BACTERIAL COMMUNITIES

Biological Research Center, Szeged, Hungary

10.30-11.00

LSP-4

♦ISTVÁN SZABÓ¹, BENCE PRIKLER², GÁBOR BORDÓS², ADRIENN MICSINAI², BRIGITTA NYÍRÓ-FEKETE², ZOLTÁN VAJNAI¹, CLAUDIA KING¹, RÓZSA SEBŐK¹, EDIT KASZAB³, SÁNDOR SZOBOSZLAY¹, BALÁZS KRISZT³

IN SITU ANALYSES OF THE EFFECTS OF TREATED WASTEWATER ON BACTERIAL COMMUNITY COLONIZING LIMNETIC PLASTICS

¹Department of Environmental Toxicology, Hungarian University of Agriculture and Life Sciences, Gödöllő; ²Eurofins Analytical Services Hungary Ltd., Budapest; ³Department of Environmental Safety, Hungarian University of Agricultural and Life Sciences, Gödöllő, Hungary

11.00-11.30 Coffee break

11.30-12.25 **Károly Schilberszky Agricultural and Food Microbiology Short (Poster) Presentations**

Schilberszky, Károly (1863 - 1935), Hungarian phytopathologist, university professor. He graduated as a geography - natural history teacher in Budapest. In 1887, he became a co-worker of the Seed Examination Station in Budapest. During the years 1888-94, he was assistant professor at the Science University in Budapest, where he obtained his PhD in 1894. From this year on, he became full professor at the Horticultural College in Budapest. Founder of several plant pathology laboratories, and other institutions. He was primarily interested in the field of plant pathogenic fungi (like monilia, powdery mildew, wheat rust), but worked with potato diseases, including potato blight. His mushroom preparations and plant pathology panel pictures were awarded by gold medal at the Paris World Exhibition in 1900

Chairpersons: Henrietta Allaga and György Sipos

11.30-11.35

AFP-1

♦TÜNDE TAKÁCS, PÉTER JUHÁSZ, SÁNDOR PABAR, KATICA KOCSIS, AMBRUS RÉV, ANNA FÜZY

GLOMALIN-RELATED SOIL PROTEIN AS A POTENTIAL INDICATOR OF SOIL HEALTH

¹Institute for Soil Sciences, Centre for Agricultural Research, ELRN, Budapest, Hungary

11.35-11.40

AFP-2

♦ÁKOS SUHAJDA¹, CSILLA SÖRÖS², RITA A. TÖMÖSKÖZI-FARKAS³, BALÁZS KRISZT¹, MÁTYÁS CSERHÁTI¹

INVESTIGATION OF THE BEAUVERICIN PRODUCTION CAPACITY OF *FUSARIUM* STRAINS CHARACTERIZED BY BEAUVERICIN SYNTHETASE GENE SEQUENCE

¹Institute of Aquaculture and Environmental Safety, Gödöllő; ²Institute of Food Science and Technology, Budapest; ³Plant Protection Institute, Hungarian University of Agriculture and Life Sciences, Budapest, Hungary

11.40-11.45

AFP-3

TAMÁS MARIK¹, GERGŐ TERNA¹, CHETNA TYAGI¹, ♦DÓRA BALÁZS¹, ÁGNES SZEPESI², LÁSZLÓ BAKACSY², ANDRÁS SZEKERES¹, MÓNIKA VARGA¹, CSABA VÁGVÖLGYI¹, LÁSZLÓ KREDICS¹

EVALUATING THE EFFECT OF PEPTAIBOLS IN AGRICULTURAL SYSTEMS

¹Department of Microbiology; ²Department of Plant Biology, Faculty of Science and Informatics, University of Szeged, Szeged, Hungary

11.45-11.50

AFP-4

♦CARLA MOTA LEAL^{1,2}, ADRIENN GEIGER^{1,3}, ANNA MOLNÁR^{1,3}, GLODIA KGOBE^{1,3}, KÁLMÁN ZOLTÁN VÁCZY², JÓZSEF GEML³

TERROIR, SEASON, AND VINTAGE EFFECTS ON GRAPEVINE PATHOBIOME COMPOSITION

¹ELKH – EKKE Lendület Environmental Microbiome Research Group, Eszterházy Károly Catholic University, Eger; ²Doctoral School of Environmental Sciences, Hungarian University of Agricultural and Life Sciences, Gödöllő; ³Food and Wine Research Institute, Eszterházy Károly Catholic University, Eger, Hungary.

11.50-11.55

AFP-5

♦THOMAS CELS¹, ÁDÁM ISTVÁN HEGYI^{1,2}, MARGOT OTTO¹, ADRIENN GOMBA-TÓTH¹, JÚLIA HEGYI-KALÓ¹, KRISZTA LILLA SZABADI¹, RICHÁRD GOLEN¹, ADRIENN GEIGER^{1,2,3}, JÓZSEF GEML^{1,3}

THE COMPLEX IMPACT OF VARIOUS FUNGI IN THE AROMATIC PROFILE OF NOBLE ROT GRAPES IN THE TOKAJ WINE REGION

¹Food and Wine Research Institute, Eszterházy Károly Catholic University, Eger; ²Doctoral School of Environmental Sciences, Hungarian University of Agriculture and Life Sciences, Gödöllő; ³MTA-EKE "Lendület" Environmental Microbiome Research group, Eszterházy Károly University, Eger, Hungary

11.55-12.00

AFP-6

◆DÓRA SZABÓ, NIKOLETT MOLNÁR, KÁLMÁN ZOLTÁN VÁCZY, ZOLTÁN KARÁCSONY

IN VITRO INTERACTIONS BETWEEN *ERWINIA BILLINGIAE* AND THE ESCA PATHOGENIC FUNGUS *PHAEOMONIELLA CHLAMYDOSPORA*

Food and Wine Research Institute, Eszterházy Károly Catholic University, Eger, Hungary

12.00-12.05

AFP-7

◆AMBRUS RÉV^{1,2}, ISTVÁN PARÁDI^{2,3}, ANNA FÜZY², PÉTER JUHÁSZ², KATICA MOLNÁR-KOCSIS², IMRE CSERESNYÉS², TÜNDE TAKÁCS²

COMBINED EFFECTS OF WASTEWATER SLUDGE COMPOST AND ARBUSCULAR MYCORRHIZAL FUNGI ON IMPROVEMENT OF SOIL FERTILITY AND RHIZOSPHERIC ACTIVITY OF GIANT REED (*ARUNDO DONAX* L.)

¹Doctoral School of Environmental Science, Faculty of Science, ELTE-Eötvös Loránd University; ²Institute for Soil Science, Centre for Agricultural Research; ³Department of Plant Physiology and Molecular Plant Biology, Institute of Biology, Faculty of Natural Science, ELTE-Eötvös Loránd University, Budapest, Hungary

AFP-8

12.05-12.10

◆HENRIETTA ALLAGA¹, ANNA CSENGE TAKÁCS¹, CSABA CSUTORÁS², JUDIT BAJZÁT², NÓRA BAKOS-BARCSI², AMANDA SÁNDORNÉ SZŐKE², LILLA LUCA LUKÁCS², ANDRÁS MISZ², CSABA VÁGVÖLGYI¹, LÁSZLÓ KREDICS¹

MICROBIAL COLONISATION OF SPENT MUSHROOM COMPOST

¹Department of Microbiology, Faculty of Science and Informatics, University of Szeged, Szeged; ²Új Champignons Ltd., Budapest, Hungary

12.10-12.15

AFP-9

SUSANA ARAUJO

ANTIFUNGAL IN VITRO EVALUATION OF *TRICHODERMA* SPP. ISOLATED FROM YELLOW PITAHAYA (*SELENICEREUS MEGALANTHUS*) CROPS AGAINST *ALTERNARIA* SPP.

Hungarian University of Agriculture and Life sciences, Gödöllő, Hungary

12.15-12.20

AFP-10

◆MÁTÉ FUTÓ¹, PÉTER BALÁZS¹, ÉVA PREININGER², TAMÁS LAKATOS², PÉTER FUTÓ¹, BOGLÁRKA VARGÁNÉ KÜRTÖSSY¹, JÓZSEF KUTASI¹

SCREENING OF MICROALGAL STRAINS SELECTED FROM FRESHWATER GREEN MICROALGAE COLLECTION FOR ANTIBACTERIAL ACTIVITY AND TESTING OF ARTIFICIALLY INFECTED FRUIT FLOWERS

¹Albitech Biotechnological Ltd.; ²Research Centre for Fruitgrowing, Institute of Horticultural Sciences, Hungarian University of Agriculture and Life Sciences, Budapest, Hungary

12.20-12.25

AFP-11

◆TAMÁS KOVÁCS¹, FANNI KOVÁCS¹, MÓNIKA VARGA¹, RÓBERT MIHÁLY², CSABA VÁGVÖLGYI¹, MIKLÓS TAKÓ¹, JUDIT KRISCH³

ENRICHMENT OF BIOACTIVE PHENOLICS FROM OAT HULL SAMPLES BY ENZYMES OF *MUCOROMYCOTA* FUNGI

¹Department of Microbiology, Faculty of Science and Informatics, University of Szeged; ²Cereal Research Non-profit Ltd.; ³Institute of Food Engineering, Faculty of Engineering, University of Szeged, Szeged, Hungary

12.25-14.00 Lunch break

14.00-14.30 Alfred Hershey Bacteriology and Virology Short (Poster) Presentations

Hershey, Alfred Day (1908-1997), American Nobel laureate bacteriologist, geneticist. He received his B.S. in chemistry at Michigan State University in 1930 and his Ph.D. in bacteriology in 1934, taking a position thereafter at the Department of Bacteriology at Washington University in St. Louis. He performed experiments with bacteriophages with Salvador Luria, and Max Delbrück in 1940, and observed that when two different strains of bacteriophage have infected the same bacteria, the two viruses may exchange genetic information. In 1950, he moved with his assistant Martha Chase to the Carnegie Institution of Washington's Department of Genetics, where he and Chase performed the famous Hershey–Chase experiment in 1952. This experiment provided additional evidence that DNA, not protein, was the genetic material of life. He became director of the Carnegie Institution in 1962.

Chairpersons: Orsolya Dobay and Eszter Csoma

14.00-14.05

HPP-1

FANNI RAPCSÁK

COMPARATIVE BIOFILM ANALYSIS OF *SALMONELLA* SEROVARS AND COHABITANT *ESCHERICHIA COLI* STRAINS

Enteric Bacteriology and Foodborne Zoonosis, Veterinary Medical Research Institute, Budapest, Hungary

14.05-14.10

HPP-2

◆GERGŐ SÁVAI¹, TÜNDE KARTALI¹, CINTIA LOVAS¹, ROLAND PATAI², ZOLTÁN LIPINSZKI³, CSABA VÁGVÖLGYI¹, TAMÁS PAPP¹

IDENTIFICATION OF NOVEL MYCOVIRUSES IN *RHIZOPUS* SPECIES

¹Department of Microbiology, Faculty of Science and Informatics, University of Szeged; ²Neuronal Plasticity Research Group, Institute of Biophysics; ³MTA SZBK "Lendület" Laboratory of Cell Cycle Regulation, Institute of Biochemistry, Biological Research Centre, Szeged, Hungary

14.10-14.15

HPP-3

TAMÁS PIVARCSIK², ◆GABRIELLA SPENGLER^{1,2}, GERGŐ EGRI², IMRE UGRAI³, ISTVÁN SZATMÁRI³, ÉVA A. ENYEDY²

ORGANORHODIUM COMPLEXES OF 8-HYDROXYQUINOLINE DERIVATIVES WITH ANTIBACTERIAL AND ANTITUMOR EFFECT

¹Department of Medical Microbiology, Albert Szent-Györgyi Health Center and Albert Szent-Györgyi Medical School; ²MTA-SZTE "Lendület" Functional Metal Complexes Research Group, Department of Inorganic and Analytical Chemistry, Interdisciplinary Centre, Faculty of Science and Informatics; ³Institute of Pharmaceutical Chemistry, Faculty of Pharmacy, University of Szeged, Szeged, Hungary

14.15-14.20

HPP-4

RENÁTA VARGA-KUGLER^{1,2}, ESZTER KASZAB^{1,2,3}, DÓRA MÁTÉ¹, FERENC JAKAB⁴, KRISZTIÁN BÁNYAI^{1,2}, ◆ENIKŐ FEHÉR^{1,2}

INVESTIGATION OF DIVERSITY AND HOST SPECTRUM OF CORONAVIRUSES

¹Veterinary Medical Research Institute; ²National Laboratory for Infectious Animal Diseases, Antimicrobial Resistance, Veterinary Public Health and Food Chain Safety, Budapest; ³Institute of Metagenomics, University of Debrecen, Debrecen; ⁴National Laboratory of Virology, Szentágotthai Research Centre, University of Pécs, Pécs, Hungary

14.20-14.25

HPP-5

◆CSILLA VERES, CSABA VÁGVÖLGYI

EFFICIENCY OF COLD PLASMA TREATMENT AGAINST *SALMONELLA TYPHYMURIUM* AND *SALMONELLA ENTERICA*

Department of Microbiology, Faculty of Science and Informatics, University of Szeged, Szeged, Hungary

14.25-14.30

HPP-6

◆KRISZTINA JELES, MELINDA KATONA, ESZTER CSOMA

THE 9TH HUMAN POLYOMAVIRUS

Department of Medical Microbiology, University of Debrecen, Debrecen, Hungary

14.30-15.00 Coffee break

15.00-16.15 Károly Schilberszky Agricultural and Food Microbiology Oral Presentations

Szilberszky, Károly (1863 - 1935), Hungarian phytopathologist, university professor. He graduated as a geography - natural history teacher in Budapest. In 1887, he became a co-worker of the Seed Examination Station in Budapest. During the years 1888-94, he was assistant professor at the Science University in Budapest, where he obtained his PhD in 1894. From this year on, he became full professor at the Horticultural College in Budapest. Founder of several plant pathology laboratories, and other institutions. He was primarily interested in the field of plant pathogenic fungi (like monilia, powdery mildew, wheat rust), but worked with potato diseases, including potato blight. His mushroom preparations and plant pathology panel pictures were awarded by gold medal at the Paris World Exhibition in 1900

Chairpersons: Tünde Pusztahelyi and Erika Bencsik-Kerekes

15.00-15.15

AFO-1

◆KATALIN PAPPNÉ MURVAI¹, HANNA V. RÁCZ¹, ALEXANDRA IMRE², ENIKŐ HORVÁTH², KADMIEL NALIEL PEREIRA², FERENC PELES³, PÉTER SIPOS⁴, BÉLA BÉRI⁵, TÜNDE PUSZTAHELYI⁶, ISTVÁN PÓCSI², VALTER PÉTER PFLIEGLER²

MICROBIAL ANALYSIS OF HUNGARIAN FORAGE SAMPLES

¹Doctoral School of Nutrition and Food Sciences; ²Department of Molecular Biotechnology and Microbiology; ³Institute of Food Science; ⁴Institute of Nutrition; ⁵Department of Animal Husbandry; ⁶Central Laboratory of Agricultural and Food Products, University of Debrecen, Debrecen, Hungary

15.15-15.30

AFO-2

◆ÁDÁM ISTVÁN HEGYI^{1,2}, MARGOT OTTO¹, ADRIENN GOMBA-TÓTH¹, JÚLIA HEGYI-KALÓ¹, THOMAS CELS¹, KRISZTA LILLA SZABADI¹, RICHÁRD GOLEN¹, ADRIENN GEIGER^{1,2,3}, JÓZSEF GEML^{1,3}, KÁLMÁN ZOLTÁN VÁCZY¹

THE BENEFICIAL ROLE OF A PLANT PATHOGEN: THE TRANSCRIPTOMICS OF GRAPEVINE NOBLE ROT CAUSED BY *BOTRYTIS CINEREA*

¹Food and Wine Research Institute, Eszterházy Károly Catholic University, Eger; ²Doctoral School of Environmental Sciences, Hungarian University of Agriculture and Life Sciences, Gödöllő; ³MTA-EKE "Lendület" Environmental Microbiome Research Group, Eszterházy Károly University, Eger, Hungary

15.30-15.45

AFO-3

◆ANNA MOLNÁR¹, DÁNIEL G. KNAPP², MIKLÓS LOVAS¹, GERGŐ TÓTH^{2,3}, IMRE BOLDIZSÁR^{2,4}, KÁLMÁN ZOLTÁN VÁCZY¹, GÁBOR M. KOVÁCS^{2,5}

TAXONOMIC AND METABOLIC CHARACTERIZATION OF *ALTERNARIA* SPECIES IN GRAPEVINE (*VITIS VINIFERA*) IN HUNGARY

¹Food and Wine Research Centre, Eszterházy Károly Catholic University, Eger; ²Department of Plant Anatomy, Institute of Biology, Faculty of Science, ELTE-Eötvös Loránd University; ³Department of Pharmaceutical Chemistry; ⁴Department of Pharmacognosy, Faculty of Pharmacy, Semmelweis University; ⁵Plant Protection Institute, Centre for Agricultural Research, Budapest, Hungary

15.45-16.00

AFO-4

◆DÓRA BALÁZS, TAMÁS MARIK, ÁKOS ROZSNYÓI, ANDRÁS SZEKERES, CSABA VÁGVÖLGYI, CHETNA TYAGI, LÁSZLÓ KREDICS

COMPREHENSIVE INVESTIGATION OF PEPTAIBOLS PRODUCED BY *TRICHODERMA* FUNGAL SPECIES TO ESTABLISH THEIR PRACTICAL APPLICATION

Department of Microbiology, Faculty of Science and Informatics, University of Szeged, Szeged, Hungary

16.00-16.15

AFO-5

◆ERIKA BENCSIK-KEREKES, VIKTÓRIA SEBŐK, MARIANA MAGALHÃES, MIKLÓS TAKÓ, CSABA VÁGVÖLGYI

EFFECT OF QS SIGNALING MOLECULES AND ESSENTIAL OILS ON BIOLOGICAL ACTIVITIES OF FOOD-CONTAMINATING YEASTS

Department of Microbiology, Faculty of Science and Informatics, University of Szeged, Szeged, Hungary

18.00- Banquet Dinner in the Hemingway Restaurant

Thursday, July 6

Lóczy Lajos Auditorium (0-804)

9.00-11.00 Agostino Bassi Semi-plenary Session

Bassi, Agostino (1773 - 1856), Italian entomologist. Son of a proprietor and lawyer with deep interest in biology. His father wanted him to become a civil servant. Bassi did so, but also followed the lessons of Lazzaro Spallanzani, a relative, until he died. From 1805 on his interest focused on the killing white muscardine disease of silkworms (*Bombyx mori*). The disease initially appeared in Italy, then in France, by 1849, the silk farms were almost all abandoned because of this devastating disease. To find the cause of the disease took Bassi 25 years. He published the results, stating that a living entity was the causative agent, and that it was contagious; the white powdery appearance on the killed silkworms is caused by the fungal spore mass of *Beauveria bassiana* - as it is called today in honor of him. He formulated control recommendations (disinfectants; isolation). From this work, he expanded on a theory explaining that pathogenic organisms caused many diseases of plants, animals and human beings. In 1844, he stated the idea that not only animal (insect), but also human diseases are caused by other living microorganisms; for example, measles, syphilis, and the plague. He thus preceded the work of Louis Pasteur and Robert Koch. He was also the author of work on the culture of potatoes, on cheese, wine making, leprosy and cholera. He preceded Louis Pasteur in the discovery that microorganisms can be the cause of disease (the germ theory of disease).

Chairpersons: Csilla Szebenyi and Levente Karaffa

9.00-9.30

BSP-1

◆ISTVÁN PÓCSI¹, ATTILA NAGY²

NKFIH 2018-1.2.1-NKP-2018-00002 – SUMMARY OF A HUNGARIAN MULTIDISCIPLINARY AFLATOXIN PROJECT

¹Department of Molecular Biotechnology and Microbiology, Institute of Biotechnology, Faculty of Science and Technology, University of Debrecen, Debrecen; ²Food Chain Safety Laboratory Directorate, National Food Chain Safety Office, Budapest, Hungary

9.30-10.00

BSP-2

◆TÜNDE PUSZTAHELYI¹, CINTIA ADÁCSI¹, SZILVIA KOVÁCS¹, ATTILA DOBOS², VALTER PÉTER PFLIEGLER^{3,4}, K. MADHAVAN NAMPOOTHIRI⁵, ISTVÁN PÓCSI^{3,4}

MYCOTOXINS IN FOOD CHAIN - CLIMATE EFFECT AND ELIMINATION STUDIES

¹Central Laboratory of Agricultural and Food Products, Faculty of Agricultural and Food Sciences and Environmental Management; ²Centre for Precision Farming R&D Services, Faculty of Agricultural and Food Sciences and Environmental Management, University of Debrecen; ³Fungal Stress Biology Research Group, ELRN, University of Debrecen; ⁴Department of Molecular Biotechnology and Microbiology, Institute of Biotechnology, Faculty of Science and Technology, University of Debrecen, Debrecen, Hungary; ⁵Microbial Processes and Technology Division, CSIR-National Institute for Interdisciplinary Science and Technology, Thiruvananthapuram, India

10.00-10.30

BSP-3

ALEXANDRA MÁRTON, MICHEL FLIPPHI, VIVIEN BIRÓ, NORBERT ÁG, VIKTÓRIA ÁG-RÁCZ, ERZSÉBET FEKETE, ◆LEVENTE KARAFFA

MUTATIONS IN THE SECOND ALTERNATIVE OXIDASE GENE: A NEW APPROACH TO GROUP *ASPERGILLUS NIGER* STRAINS

Department of Biochemical Engineering, Institute of Biotechnology, Faculty of Science and Technology, University of Debrecen, Debrecen, Hungary

10.30-11.00

BSP-4

◆MARGOT OTTO¹, JÓZSEF KUN²

METATRANSCRIPTOMIC ANALYSES OF GRAPES REVEAL DIFFERENCES IN EXPRESSED FUNCTIONAL GENES OF FILAMENTOUS AND YEAST FUNGI DURING NOBLE ROT AND GREY ROT

¹Food and Wine Research Institute, Eszterházy Károly Catholic University, Eger; ²Department of Pharmacology and Pharmacotherapy, Medical School, University of Pécs, Pécs, Hungary

11.00-11.30 Coffee break

11.30-12.15 Miklós Olgay Mycology Short (Poster) Presentations

Olgay, Miklós (1904 – 1958), Hungarian mycologist, phytopathologist. He obtained agricultural graduation in 1929 at the Faculty of Economics of the Royal Hungarian University of Sciences Budapest. Obtained his PhD in the field of plant pathology. From 1927 on, he was first trainee, then assistant professor, and between 1941–1947 associate research professor in the Pest Control Research Institute in Budapest. In 1944, he was promoted to private-docent, then in 1947 to full professor at the Faculty of Economics of the Palatine Joseph University of Technology and Economics. From 1948 on, he worked at the Faculty of Horticulture of the University of Agriculture. He investigated the pathogenic fungi of cultivated plants.

Chairpersons: Éva Leiter and István Pócsi

11.30-11.35

MPP-1

◆VERONIKA BODNÁR^{1,2}, KLAUDIA PÁKOZDI^{1,2}, ANITA KIRÁLY¹, SZILÁRD PÓLISKA³, ANTAL KÁROLY⁴, ÉVA LEITER^{1,5}, ISTVÁN PÓCSI^{1,5}, TAMÁS EMRI^{1,5}

OSMOTIC STRESS ELICITED GENE EXPRESSION CHANGES IN *ASPERGILLUS WENTII* WILD-TYPE AND 'c *gfdB* AND *ASPERGILLUS NIDULANS* WILD-TYPE AND Δ *gfdB* MUTANT STRAINS

¹Department of Molecular Biotechnology and Microbiology, Institute of Biotechnology, Faculty of Science and Technology; ²Doctoral School of Nutrition and Food Sciences, University of Debrecen; ³Genomic Medicine and Bioinformatic Core Facility, Department of Biochemistry and Molecular Biology, Faculty of Medicine, University of Debrecen, Debrecen; ⁴Department of Zoology, Eszterházy Károly Catholic University, Eger; ⁵ELRN-UD Fungal Stress Biology Research Group, University of Debrecen, Debrecen, Hungary

11.35-11.40

MPP-2

◆KLAUDIA PÁKOZDI^{1,2}, ZSUZSA SZABÓ², KATALIN PAPPNÉ-MURVAI^{1,2}, GÉZA HEGEDŰS³, TAMÁS EMRI^{2,4}, ISTVÁN PÓCSI^{2,4}, ESZTER VIRÁG^{2,3}

TRANSCRIPTOMIC ADAPTATION TO SUPEROXIDE STRESS IN Δ *fvatfA* AND Δ *fymnSOD* *FUSARIUM VERTICILLOIDES* STRAINS

¹Doctoral School of Nutrition and Food Sciences; ²Department of Molecular Biotechnology and Microbiology; ³Institute of Metagenomics; ⁴ELRN-UD Fungal Stress Biology Research Group, University of Debrecen, Debrecen, Hungary

11.40-11.45

MPP-3

◆MÁTÉ LAJOS CSIKÓS¹, ÁDÁM NOVÁK¹, CSABA VÁGVÖLGYI¹, ATTILA GÁCSE^{1,2}

STUDYING THE POTENTIAL OF “TRAINED IMMUNITY” IN HUMAN ORAL EPITHELIAL CELLS USING *CANDIDA* SPECIES

¹Department of Microbiology, Faculty of Science and Informatics; ²HCEMM-USZ Fungal Pathogens Research Group, University of Szeged, Szeged, Hungary

11.45-11.50

MPP-4

◆ZÓRA SZILOVICS¹, ÉVA VERES¹, KRISZTINA BUZÁS², CSABA VÁGVÖLGYI¹, ATTILA GÁCSE^{3,4}

STUDYING THE INTERACTION BETWEEN ORAL PATHOGENIC BACTERIA AND *CANDIDA* SPECIES IN AN INDIRECT MANNER: INTERKINGDOM COMMUNICATION AT THE LEVEL OF EXTRACELLULAR VESICLES

¹Department of Microbiology, Faculty of Science and Informatics, University of Szeged; ²Synthetic and System Biology Unit, Biological Research Centre; ³HCEMM-USZ Fungal Pathogens Research Group; ⁴MTA-SZTE "Lendület" „Mycobiome” Research Group, University of Szeged, Szeged, Hungary

11.50-11.55

MPP-5

◆FLORABELLE R. CABARRUBIAS¹, TAMÁS TAKÁCS¹, ATTILA GÁCSE^{1,2,3}

INFLUENCE OF *CANDIDA ALBICANS* AND *CANDIDA PARAPSILOSIS* INFECTION ON MACROPHAGE POLARIZATION AND PHAGOCYTOTIC ACTIVITY

¹Department of Microbiology, Faculty of Science and Informatics; ²MTA-SZTE "Lendület" „Mycobiome” Research Group; ³HCEMM-SZTE Pathogen Fungi Research Group, University of Szeged, Szeged, Hungary

11.55-12.00

MPP-6

◆ADRIENN GOMBA-TÓTH, TIBOR KISS, KRISZTA LILLA SZABADI, ZOLTÁN KARÁCSONY, ZSOLT SPITZMÜLLER, JÚLIA HEGYI-KALÓ, THOMAS CELS, MARGOT OTTO, RICHÁRD GOLEN, ÁDÁM ISTVÁN HEGYI, JÓZSEF GEML, KÁLMÁN ZOLTÁN VÁCZY

AN EFFECTIVE METHOD FOR EXTRACTING HIGH-QUALITY RNA FROM GRAPEVINE RICH IN SECONDARY METABOLITES

Eszterházy Károly Catholic University, Eger, Hungary

12.00-12.05

MPP-7

◆JÚLIA HEGYI-KALÓ¹, MARGOT OTTO¹, ÁDÁM ISTVÁN HEGYI^{1,2}, JÓZSEF GEML^{1,3}, ADRIENN GEIGER^{1,2,3}, RICHÁRD GOLEN¹, ADRIENN GOMBA-TÓTH¹, KRISZTA LILLA SZABADI¹, THOMAS CELS¹, KÁLMÁN ZOLTÁN VÁCZY¹

GRAPE BERRIES FUNGAL COMMUNITY IS STRONGLY RELATED TO THE GRAPE BERRIES' TEXTURABLE CHANGES DURING THE NOBLE ROT PROCESS

¹Food and Wine Research Institute, Eszterházy Károly Catholic University, Eger; ²Doctoral School of Environmental Sciences, Hungarian University of Agriculture and Life Sciences, Gödöllő; ³ELKH-EKKE "Lendület" Environmental Microbiome Research Group, Eszterházy Károly Catholic University, Eger, Hungary

12.05-12.10

MPP-8

ADRIENN GEIGER, ◆ZOLTÁN KARÁCSONY, KÁLMÁN ZOLTÁN VÁCZY

FIRST REPORT OF MYCOPARASITISM IN *DIAPORTHE* SPECIES ASSOCIATED WITH GRAPEVINE TRUNK DISEASES

Food and Wine Research Institute, Eszterházy Károly Catholic University, Eger, Hungary

12.10-12.15

MPP-9

◆RÓZSA STIPS¹, BENCE PRIKLER^{1,2}, CSABA DOBOLYI¹, SÁNDOR SZOBOSZLAY¹, BALÁZS KRISZT¹, ISTVÁN SZABÓ¹

EFFECTS OF TREATED WASTEWATER DISCHARGE INTO A STREAM ON MICROSCOPIC FUNGAL COMMUNITIES OF MICROPLASTIC SURFACES

¹Institute of Aquaculture and Environmental Safety, Hungarian University of Agriculture and Life Sciences, Gödöllő; ²Eurofins Analytical Services Ltd., Budapest, Hungary

12.20-14.30 Lunch Break

14.30-16.00 Miklós Olgay Mycology Oral Presentations

Olgay, Miklós (1904 – 1958), Hungarian mycologist, phytopathologist. He obtained agricultural graduation in 1929 at the Faculty of Economics of the Royal Hungarian University of Sciences Budapest. Obtained his PhD in the field of plant pathology. From 1927 on, he was first trainee, then assistant professor, and between 1941–1947 associate research professor in the Pest Control Research Institute in Budapest. In 1944, he was promoted to private-docent, then in 1947 to full professor at the Faculty of Economics of the Palatine Joseph University of Technology and Economics. From 1948 on, he worked at the Faculty of Horticulture of the University of Agriculture. He investigated the pathogenic fungi of cultivated plants.

Chairpersons: Csilla Szebenyi and István Pócsi

14,30-14.45

MOP-1

◆KITTI BAUER¹, CSILLA SZEHENYI^{1,2}, BENCE RAFAEL¹, SÁNDOR KISS-VETRÁB¹, BERNADETT VÁGÓ¹, MÓNICA VARGA¹, CSABA VÁGVÖLGYI¹, TAMÁS PAPP^{1,2}, GÁBOR NAGY^{1,2}

ERGOSTEROL BIOSYNTHESIS AND ALTERNATIVE BIOSYNTHESIS PATHWAYS IN *MUCOR LUSITANICUS*

¹Department of Microbiology, Faculty of Science and Informatics; ²ELKH-SZTE Pathomechanism of Fungal infections Research Group, University of Szeged, Szeged, Hungary

14.45-15.00

MOP-2

◆SÁNDOR KISS-VETRÁB^{1,2}, KITTI BAUER^{1,2}, BENCE RAFAEL^{1,2}, BERNADETT VÁGÓ^{1,2}, ANNA MOLNÁR^{1,2}, CSILLA SZEBENYI^{1,2}, CSABA VÁGVÖLGYI^{1,2}, TAMÁS PAPP^{1,2}, GÁBOR NAGY^{1,2}

GENES INVOLVED IN AZOLE RESISTANCE OF *MUCOR LUSITANICUS* AND THEIR REGULATION

¹Department of Microbiology, Faculty of Science and Informatics; ²ELKH-SZTE Pathomechanism of Fungal infections Research Group, University of Szeged, Szeged, Hungary

15.00-15.15

MOP-3

◆ANNA MOLNÁR¹, VANDA KOVÁCS¹, CSILLA MASA¹, LÁSZLÓ GALGÓCZY¹, A. S. T. KHALIEFEH SILIMAN¹, CSABA VÁGVÖLGYI^{1,2}, GÁBOR NAGY^{1,2}, TAMÁS PAPP^{1,2}, CSILLA SZEBENYI^{1,2}

CHARACTERIZATION AND HETEROLOGOUS EXPRESSION OF *MUCOR LUSITANICUS* HsbA PROTEINS

¹Department of Microbiology; ²ELKH-SZTE Fungal Pathomechanisms Research Group, Faculty of Science and Informatics, University of Szeged, Szeged, Hungary

15.15-15.30

MOP-4

◆BERNADETT VÁGÓ, KITTI BAUER, BENCE RAFAEL, SÁNDOR KISS-VETRÁB, ANNA MOLNÁR, CSILLA SZEBENYI, SÁNDOR KOCSUBÉ, CSABA VÁGVÖLGYI, TAMÁS PAPP, GÁBOR NAGY

THE ROLE OF THE SIT1 SIDEROPHORE TRANSPORTER IN *MUCOR LUSITANICUS*

Department of Microbiology and ELKH-SZTE Pathomechanism of Fungal infections Research Group, Faculty of Science and Informatics, University of Szeged, Szeged, Hungary

15.30-15.45

MOP-5

◆ÉVA MAH^{1,2}, VERONIKA BODNÁR², ANITA KIRÁLY², TAMÁS EMRI^{1,2}, ISTVÁN PÓCSI^{1,2}

CHARACTERIZATION OF THE SUPPLEMENTATION OF *ASPERGILLUS NIDULANS* *gfdB* IN OSMOPHILIC ASPERGILLI

¹ELRN-UD Fungal Stress Biology Research Group; ²Department of Molecular Biotechnology and Microbiology, Faculty of Science and Technology, University of Debrecen, Debrecen, Hungary

15.45-16.00

MOP-6

◆BEATRIX KOCSIS^{1,2}, IMRE BOLDIZSÁR³, GÁBOR M. KOVÁCS³, TIBOR NAGY⁴, GYÖNGYI GYÉMÁNT⁵, ATTILA GÁSPÁR⁵, KINGA CSILLAG¹, ISTVÁN PÓCSI^{1,2}, ÉVA LEITER^{1,2}

FUNCTIONAL ANALYSIS OF THE DELETION AND OVEREXPRESSION MUTANTS OF THE TRANSCRIPTION FACTOR (AN7872) REGULATING THE AN7884 SECONDARY METABOLITE GENE CLUSTER

¹Department of Molecular Biotechnology and Microbiology, Faculty of Science and Technology; ²ELRN-UD Fungal Stress Biology Research Group, University of Debrecen, Debrecen; ³Department of Plant Anatomy, Faculty of Science, ELTE-Eötvös Loránd University, Budapest; ⁴Department of Applied Chemistry; ⁵Department of Inorganic and Analytical Chemistry, Faculty of Science and Technology, University of Debrecen, Debrecen, Hungary

18.00- Banquet Dinner in the Hemingway Restaurant

Friday, July 7

Szabó József Auditorium (0-803)

8.30-10.30 Edward Jenner Semiplinary Session

Jenner, Edward (1749 - 1823), an English physician. Born in Berkeley, Gloucestershire, England. During his school time, he was variolated for smallpox. At the age of 14, he was apprenticed at a surgeon, and in 1770, became apprenticed at St George's Hospital, London. Returning home by 1773, Jenner became a successful family doctor and surgeon. In 1792, Jenner obtained the degree of MD from the University of St Andrews. Jenner contributed papers on angina pectoris, ophthalmia, and cardiac valvular disease and commented on cowpox. He was elected fellow of the Royal Society in 1788, on his publication on the life of cuckoo. Variolation was already a standard practice in medicine but involved serious risks. Jenner observed that milkmaids were generally immune to smallpox, and postulated that cowpox protected them from smallpox. Jenner inoculated a boy with cowpox pus, evoking fever and some uneasiness, but no full-blown infection. Later, infecting the boy by variolous material, no disease followed. Jenner continued his research, „vaccinating” even his 11-month-old son, and reported the results to the Royal Society. Jenner was later elected honorary member of different academies (US, Sweden). In 1821, he was appointed physician extraordinary to King George IV, and was made mayor of Berkeley. Vaccination was accepted, and in 1840, the British government banned variolation. In 1980, the World Health Organization declared smallpox an eradicated disease.

Chairpersons: Mária Takács and Szilvia Bősze

8.30-9.00

JSP-1

◆BENCE RAFAEL^{1,2}, KITTI BAUER^{1,2}, BERNADETT VÁGÓ^{1,2}, SÁNDOR KISS-VETRÁB^{1,2}, ANNA MOLNÁR^{1,2}, CSILLA SZEBENYI^{1,2}, MÓNIKA VARGA^{1,2}, ANDRÁS SZEKERES^{1,2}, CSABA VÁGVÖLGYI^{1,2}, GÁBOR NAGY^{1,2}, TAMÁS PAPP^{1,2}

CHARACTERIZATION OF C-5 STEROL DESATURASE GENE REVEALS ALTERED VIRULENCE ALONG WITH CHANGES IN THE CELL WALL STRUCTURE IN *MUCOR LUSITANICUS*

¹Department of Microbiology; ²ELKH-SZTE Fungal Patomechanisms Research Group, Faculty of Science and Informatics, University of Szeged, Szeged, Hungary

9.00-9.30

JSP-2

◆CHIARA BELLINI^{1,2}, EMIL VERGARA³, KINGA FODOR⁴, SZILVIA BŐSZE⁵, DENIS KRIVIC⁶, BERNADETT BACSA⁶, SÁRA ESZTER SURGUTA⁷, JÓZSEF TÓVÁRI⁷, RAIKO RELJIC³, KATA HORVÁTI²

DESIGN AND CHARACTERIZATION OF A MULTISTAGE PEPTIDE-BASED VACCINATION PLATFORM TO TARGET *MYCOBACTERIUM TUBERCULOSIS* INFECTION

¹Hevesy György PhD School of Chemistry, Eötvös Loránd University; ²MTA-TTK “Momentum” Peptide-Based Vaccines Research Group, Institute of Materials and Environmental Chemistry, Research Centre for Natural Sciences, Budapest, Hungary; ³Institute for Infection and Immunity, St. George's, University of London, London, United Kingdom; ⁴Department of Laboratory Animal Science and Animal Protection, University of Veterinary Medicine; ⁵ELKH-ELTE Research Group of Peptide Chemistry, Budapest, Hungary; ⁶Division of Medical Physics and Biophysics, Gottfried Schatz Research Center, Medical University of Graz, Graz, Austria; ⁷Department of Experimental Pharmacology and National Tumor Biology Laboratory, National Institute of Oncology, Budapest, Hungary

9.30-10.00

JSP-3

◆ANNA NAGY¹, ANDREA SKOBRÁK², GÁBOR SIMON², ESZTER MEZEI³, ORSOLYA NAGY¹, ANITA KOROKNAI¹, NIKOLETT CSONKA¹, MÁRIA TAKÁCS¹

TICK-BORNE ENCEPHALITIS VIRUS IN HUNGARY – A CASE STUDY OF AN ALIMENTARY INFECTION

¹National Reference Laboratory for Viral Zoonoses, National Public Health Center, Budapest; ²Department of Infant and Pediatric Medicine, Teaching Hospital Mór Kaposi, Kaposvár; ³Department of Epidemiological and Vaccination Surveillance, National Public Health Center, Budapest, Hungary

10.00-10.30

JSP-4

◆ÉVA VERES¹, ZÓRA SZILOVICS¹, GERGŐ SVORENJ¹, DÓRA ADAMECZ², MÁTÉ VADOVICS¹, KRISZTINA BUZÁS³, MÓNICA KIRICSI², CSABA VÁGVÖLGYI¹, ATTILA GÁCSE^{1,4,5}

THE EFFECT OF *CANDIDA*-DERIVED EXTRACELLULAR VESICLES AND CANDIDALYSIN TO THE PROGRESSION OF ORAL SQUAMOUS CELL CARCINOMA

¹Department of Microbiology; ²Department of Biochemistry and Molecular Biology, Faculty of Science and Informatics, University of Szeged; ³Synthetic and System Biology Unit, Biological Research Centre; ⁴HCEMM-USZ Fungal Pathogens Research Group; ⁵MTA-SZTE "Lendület" Mycobiome Research Group, University of Szeged, Szeged, Hungary

10.30-11.00 Coffee break

11.00-12.30 Daniel Carleton Gajdusek Virology Oral Presentations

Gajdusek, Daniel Carleton (1923 - 2008), American physician, shared Nobel Prize recipient (1976) for his work on „unconventional viruses”. His father of Slovak ethnicity and mother of Hungarian ethnicity derived from the Kingdom of Hungary. Gajdusek was born in Yonkers, New York. He graduated in 1943 at the University of Rochester, and obtained an M.D. from Harvard University in 1946. In 1954, he went to work as a visiting investigator at the Walter and Eliza Hall Institute of Medical Research in Melbourne, Australia, where he began to work with kuru, the "laughing sickness" of the Fore cannibal people of New Guinea. Later he was the chief of the Laboratory of Central Nervous System Studies at NINDS at the National Institutes of Health (NIH). He gave the medical description of the kuru neurological disorder. Gajdusek connected the spread of the disease to the ritualistic consumption of the brains of deceased relatives. He proved this hypothesis by successfully transmitting the disease to primates. With elimination of cannibalism, kuru disappeared among the South Fore within a generation. Kuru had remarkable similarity to scrapie, and e.g. Creutzfeldt–Jakob disease. The „unconventional virus” infectious agents later proved to be misfolded proteins, prions. At the end of the 90's Gajdusek was sentenced for child molestation to 12 month jail, after his release permitted to unsupervised probation to Europe. Lived in Amsterdam, and Tromsø, and never returned to the US.

Chairpersons: Ágnes Dencs and Szalmás Anita

11.00-11.15

VOP-1

LEILA RAHMANI, ZSOLT BARNABÁS ÉLES, JÓZSEF KÓNYA, ◆ANITA SZALMÁS

HUMAN PAPILLOMAVIRUS E7 PROTEINS ASSOCIATE WITH MYPT1

Department of Medical Microbiology, University of Debrecen, Debrecen, Hungary

11.15-11.30

VOP-2

◆ÁGNES DENCs, ANDREA HETTMANN, ANNA NAGY, ERZSÉBET RUSVAL, ERZSÉBET BARCSAY, MÁRIA TAKÁCS

PHYLOGENETIC ANALYSIS OF A NOVEL HEPATITIS A VIRUS IB STRAIN SPREADING IN HUNGARY IN 2022

Virology Division, National Public Health Center, Budapest, Hungary

11.30-11.45

VOP-3

JÚLIA TÁRNOKI-ZÁCH¹, KATA HORVÁTI², BERNADETT PÁLYI³, ZOLTÁN KIS³, SZILVIA BÓSZÉ², ◆ANDRÁS CZIRÓK¹

TRANSPORT KINETICS OF ANTIVIRAL COMPOUNDS PASSING THROUGH A TRANSWELL BARRIER MODEL -- MATHEMATICAL ANALYSIS AND AUTOMATED SAMPLING

¹Department of Biological Physics, Institute of Physics, Faculty of Science, ELTE-Eötvös Loránd University; ²ELRN-ELTE Research Group of Peptide Chemistry, Faculty of Science, Eötvös Loránd University; ³National Public Health Center, Budapest, Hungary

11.45-12.00

VOP-4

◆LEVENTE LAKATOS¹, ELŐD MÉHES², GYULA BALKÁ³, ILDIKÓ SZABÓ⁴, KATA HORVÁTI⁵, JÚLIA TÁRNOKI-ZÁCH², ANDRÁS CZIRÓK², BERNADETT PÁLYI⁶, ZOLTÁN KIS⁶, SZILVIA BŐSZE⁴

TISSUE MIMICKING SPHEROIDS IN SARS-COV-2 STUDIES: NEEDS AND CHALLENGES

¹Doctoral School of Biology, Institute of Biology; ²Department of Biological Physics, Institute of Physics, Faculty of Science, ELTE-Eötvös Loránd University; ³Department of Pathology and Animal Breeding, Nutrition and Laboratory Animal Science Department, University of Veterinary Medicine; ⁴ELRN-ELTE Research Group of Peptide Chemistry, Faculty of Science, Eötvös Loránd University; ⁵MTA-TTK "Momentum" Peptide-Based Vaccines Research Group, Institute of Materials and Environmental Chemistry, Research Centre for Natural Sciences; ⁶National Public Health Center, Budapest, Hungary

12.00-12.15

VOP-5

◆BENCE A. STIPSICZ¹, JÚLIA TÁRNOKI-ZÁCH², ILDIKÓ SZABÓ³, KATA HORVÁTI⁴, ELŐD MÉHES², BERNADETT PÁLYI⁵, ZOLTÁN KIS⁵, ANDRÁS CZIRÓK², SZILVIA BŐSZE³

EVALUATION OF PEPTIDE CARRIER CANDIDATES ON TISSUE BARRIER MODELS TO TARGET SARS-COV-2 INFECTED HOST CELLS

¹Biology Doctoral School, Institute of Biology; ²Department of Biological Physics, Institute of Physics; ³ELKH-ELTE Research Group of Peptide Chemistry, Institute of Chemistry, Faculty of Science, ELTE-Eötvös Loránd University; ⁴MTA-TTK "Momentum" Peptide-Based Vaccines Research Group, Institute of Materials and Environmental Chemistry, Research Centre for Natural Sciences, Eötvös Loránd Research Network; ⁵National Public Health Center, Budapest, Hungary

12.15-12.30

VOP-6

◆OLIGA COROLCIUC¹, KÁROLY NAGY², DHARAM V. ABLASHI³, JÓZSEF ONGRÁDI¹

COULD HHV-6 CONTRIBUTE TO AGEING?

¹Department of Transfusion Medicine, Semmelweis University; ²Molecular Biology Diagnostic Laboratory, Faculty of Science, ELTE-Eötvös Loránd University, Budapest, Hungary; ³HHV-6 Foundation, Santa Barbara, California, USA

13.00- Closing Sentences, and Farewell Drink

Friday, July 7

Lóczy Lajos Auditorium (0-804)

8.00-9.30 Nándor Gimesi Environmental Microbiology and Biotechnology Oral Presentations

Gimesi, Nándor István (1892-1953) Cistercian monk, botanist, hydrobiologist, microbiologist. His studies on aquatic microorganisms made him internationally known. He is also well known as a renewer of photographing, and filming microbes. In 1918 he obtained a teachers diploma at the Budapest University, and in 1920 PhD degree. He worked as teacher in the secondary schools of the Cistercian Order. With the help of the Rockefeller Fund, during 1924 and 1926 he made a study tour in the Luzern, Zürich, Plön, Helgoland, Bergen „botanic stations”. From 1943, he became the professor of the Plant Physiology Department at the Budapest University. He described *Planktomyces békefi*, this deep-branching budding bacterium, with distinctive morphology.

Chairpersons: István Szabó and Károly Márialigeti

8.00-8.15

EOP-1

♦ÁKOS ROZSNYÓI, DÓRA BALÁZS, CHETNA TYAGI, ANDRÁS SZEKERES, TAMÁS MARIK, CSABA VÁGVÖLGYI, LÁSZLÓ KREDICS

UNIVERSAL PEPTAIBOL LIBRARY

Department of Microbiology, Faculty of Science and Informatics, University of Szeged, Szeged, Hungary

8.15-8.30

EOP-2

♦GLODIA KGOBE^{1,2}, JÓZSEF GEML^{2,3}, ADRIENN GEIGER^{1,2,3}, ANNA MOLNÁR^{2,3}, CARLA MOTA LEAL^{1,2}, ADRIENN TÓTH⁴, SZABOLCS VILLANGÓ⁴, LILI MÉZES³, KÁLMÁN ZOLTÁN VÁCZY^{2,3}, ZSOLT ZSÓFI⁴

ASSESSING THE EFFECT OF ROOTSTOCK GENOTYPE ON BERRY AND LEAF FUNGAL COMMUNITY COMPOSITION AND DIVERSITY IN *VITIS VINIFERA* L. cv KÉKFRANKOS

¹Doctoral School of Environmental Sciences, Hungarian University of Agriculture and Life Sciences, Gödöllő; ²ELKH-EKKE “Lendület” Environmental Microbiome Research Group; ³Food Science and Wine Knowledge Center; ⁴Institute of Viticulture and Oenology, Eszterházy Károly Catholic University, Eger, Hungary

8.30-8.45

EOP-3

♦DALMA MÁRTON¹, MILÁN FARKAS¹, GERGELY MARÓTI², ROLAND WIRTH³, ÁKOS MALATINSZKY¹, NEVEEN MAJDI ALMALKAWI¹, ANDRÁS TÁNCICS¹, BALÁZS KRISZT¹, MÁTYÁS CSERHÁTI¹

RHIZOSPHERE MICROBIAL COMMUNITIES OF POACEAE SPECIES IN DRY HUNGARIAN GRASSLANDS: SCREENING FOR PLANT GROWTH PROMOTING PROPERTIES

¹Institute of Aquaculture and Environmental Safety, Hungarian University of Agriculture and Life Sciences, Gödöllő; ²Seqomics Biotechnology Ltd., Mórahalom; ³Department of Biotechnology, Faculty of Science and Informatics, University of Szeged, Szeged, Hungary

8.45-9.00

EOP-4

♦KINGA J. LENNERT¹, ANDREA K. BORSODI¹, ATTILA ENGLONER²

VARIATION IN THE TAXONOMIC COMPOSITION OF MICROBIOTA BY TYPE OF WATER BODY AND HABITAT IN THE RIVER DANUBE

¹Department of Microbiology, Faculty of Science, ELTE-Eötvös Loránd University; ²Centre for Ecological Research, Eötvös Loránd Research Network, Budapest, Hungary

SELMAN ABRAHAM WAKSMAN BACTERIOLOGY ORAL PRESENTATIONS

9.00-9.15

EOP-5

◆ÁBEL CSONGOR NÉMETH¹, NÓRA TÜNDE LANGE-ENYEDI², ERIKA TÓTH¹, PÉTER NÉMETH², IVETT KOVÁCS², PÉTER DOBOSY³, ATTILA DEMÉNY², ANDREA K. BORSODI¹, JUDIT MAKK¹

GEOMICROBIOLOGICAL STUDY OF MODERN MICROBIALITES IN A THERMAL SPRING (KÖRÖM, HUNGARY)

¹Department of Microbiology, Faculty of Science, ELTE-Eötvös Loránd University; ²Institute for Geological and Geochemical Research, Research Centre for Astronomy and Earth Sciences; ³Institute of Aquatic Ecology, Centre for Ecological Research, Eötvös Loránd Research Network, Budapest, Hungary

9.15-9.30

EOP-6

◆MÁRTON PÁPAI¹, ANDRÁS TÁNCICS¹, ANDREA CSÉPÁNYI¹, GERGELY MARÓTI², BALÁZS KRISZT¹, OFIR MENASHE³, TIBOR BENEDEK¹

PRELIMINARY RESULTS ON BIODEGRADATION OF DRUG RESIDUES

¹Institute for Aquaculture and Environmental Safety, Hungarian University of Agriculture and Life Sciences, Gödöllő; ²Institute of Plant Biology, Biological Research Center, Szeged, Hungary; ³BioCastle Water Technologies Ltd, Tzemah, Israel

9.30-10.00 Coffee break

10.00-11.15 Selman Abraham Waksman Bacteriology Oral Presentations

Waksman, Selman Abraham (1888 - 1973), Russian-born American biochemist, microbiologist. Born to Jewish parents, in Nova Pryluka, Kiev Governorate, Russian Empire. In 1910, after receiving his certificate from the Fifth Gymnasium in Odesa, he immigrated to the US. He graduated in 1915 with a BSc in agriculture at Rutgers College (now Rutgers University), and received MSc the following year, at the same institution. His first research interest concentrated on soil microbiology. He joined the faculty at "Rutgers" in the department of biochemistry and microbiology. In 1918, he was awarded PhD in biochemistry. His research on organotrophic soil organisms, especially Streptomycetes led to the discovery of streptomycin (produced by *Streptomyces griseus*), the first antibiotic used to cure tuberculosis. He together with his collaborators discovered other antibiotics including actinomycin, clavacin, streptothricin, grisein, neomycin, fradycin, candidin, candidin. He introduced the term antibiotic in its today's sense. In 1951, Waksman created the Waksman Foundation for Microbiology, which latter established the Waksman Institute of Microbiology (Busch Campus of Rutgers University). He acquired many awards and honors, including the Nobel Prize in 1952.

Chairpersons: Orsolya Dobay and Domonkos Sváb

10.00-10.15

BOP-1

◆BENCE BALÁZS¹, ZOLTÁN TÓTH¹, ÁKOS TÓTH², RENÁTÓ KOVÁCS¹, LÁSZLÓ MAJOROS¹

EMERGENCE OF CARBAPENEM-RESISTANT *KLEBSIELLA PNEUMONIAE* ENCODING blaOXA-48-LIKE AND blaNDM CARBAPENEMASES

¹Department of Medical Microbiology, University of Debrecen, Debrecen; ²National Public Health Centre, Budapest, Hungary

10.15-10.30

BOP-2

◆DOMONKOS SVÁB, ISTVÁN TÓTH

COMPARATIVE ANALYSIS OF RECEPTOR-BINDING PROTEINS OF BACTERIOPHAGES LYSING *ESCHERICHIA COLI* O157 STRAINS

Enteric bacteriology, Veterinary Medical Research Institute, Budapest, Hungary

10.30-10.45

BOP-3

◆BAKHTIYAR MAHMOOD¹, ELISABETH NAGY¹, DAVID LEITSCH², JÓZSEF SÓKI¹

DETECTION OF THE EXPRESSION OF 18 GENES EXPECTED TO PARTICIPATE IN METRONIDAZOLE RESISTANCE BY RT-qPCR OF *BACTEROIDES FRAGILIS* STRAINS WITH OR WITHOUT *nim* GENES AND VARIOUS METRONIDAZOLE MIC

¹Institute of Medical Microbiology, Faculty of Medicine, University of Szeged, Szeged, Hungary; ²Institute for Special Prophylaxis and Tropical Medicine, Medical University of Vienna, Vienna, Austria

10.45-11.00

BOP-4

ORSOLYA DOBAY

WHAT MAKES SEROTYPE 8 PNEUMOCOCCI THAT SUCCESSFUL?

Institute of Medical Microbiology, Faculty of Medicine, Semmelweis University, Budapest, Hungary

11.00-11.15

BOP-5

◆ZOLTÁN TÓTH, BENCE BALÁZS, LÁSZLÓ MAJOROS, RENÁTÓ KOVÁCS

A CASE OF NECROTIZING FASCIITIS AND SEVERE SEPSIS DUE TO ST23 HYPERVIRULENT *KLEBSIELLA PNEUMONIAE*

Department of Medical Microbiology, Faculty of Medicine, University of Debrecen, Debrecen, Hungary

11.15-11.45 Coffee Break

11.45-12.25 Nándor Gimesi Environmental Microbiology and Biotechnology Short (Poster) Presentations

Gimesi, Nándor István (1892-1953) Cistercian monk, botanist, hydrobiologist, microbiologist. His studies on aquatic microorganisms made him internationally known. He is also well known as a renewer of photographing, and filming microbes. In 1918 he obtained a teachers diploma at the Budapest University, and in 1920 PhD degree. He worked as teacher in the secondary schools of the Cistercian Order. With the help of the Rockefeller Fund, during 1924 and 1926 he made a study tour in the Luzern, Zürich, Plön, Helgoland, Bergen „botanic stations”. From 1943, he became the professor of the Plant Physiology Department at the Budapest University. He described *Planktomyces békefi*, this deep-branching budding bacterium, with distinctive morphology.

Chairpersons: István Szabó and Károly Márialigeti

11.45-11.50

EPP-1

◆RENÁTA ÁBRAHÁM, ÁKOS SUHAJDA, GYULA SZABÓ, ERZSÉBET BAKA, BALÁZS KRISZT, MÁTYÁS CSERHÁTI

TRANSCRIPTOME ANALYSIS OF *RHODOCOCCUS PYRIDINIVORANS* SOIL BACTERIA IN THE PRESENCE OF ZEARALENONE

Institute of Aquaculture and Environmental Safety, Hungarian University of Agriculture and Life Sciences, Gödöllő, Hungary

11.50-11.55

EPP-2

◆NEVEEN MAJDI ALMALKAWI¹, MÁTYÁS CSERHÁTI¹, DALMA MÁRTON¹, GERGELY MARÓTI², ERZSÉBET BAKA¹, ANDRÁS TÁNCICS¹, BALÁZS KRISZT¹, MILÁN FARKAS¹

ROOT COLONIZATION ABILITY OF DIFFERENT PLANT GROWTH-PROMOTING BACTERIA ON TOMATO AND MAIZE PLANTS

¹Institute of Aquaculture and Environmental Safety, Hungarian University of Agriculture and Life Sciences, Gödöllő; ²Seqomics Biotechnology Ltd., Mórahalom, Hungary

11.55-12.00

EPP-3

◆ANITA BÉKÉSY^{1,2}, ÁDÁM ILLÉS³, BOGLÁRKA SOMOGYI⁴, GYULA ZÁRAY³, TAMÁS FELFÖLDI^{1,3}

THE EFFECT OF SALT CONCENTRATION AND ANION COMPOSITION ON THE METABOLITES OF MICROALGAE

¹Department of Microbiology, Institute of Biology, ELTE-Eötvös Loránd University, Budapest; ²Institute of Genetics and Biotechnology, Hungarian University of Agriculture and Life Sciences, Gödöllő; ³Institute of Aquatic Ecology, Centre for Ecological Research, Budapest; ⁴Balaton Limnological Research Institute, Tihany, Hungary

12.00-12.05

EPP-4

◆XIAO YI CHEN^{1,2}, ATTILA SZABÓ², PÉTER DOBOSY², TAMÁS FELFÖLDI^{1,2}

FIRST REPORT ON THE PLANKTONIC BACTERIAL COMPOSITION OF THE SALINE LAKES IN CYPRUS

¹Department of Microbiology, Institute of Biology, Faculty of Science, ELTE-Eötvös Loránd University; ²Institute of Aquatic Ecology, Centre for Ecological Research, Budapest, Hungary

12.05-12.10

EPP-5

◆ANDREA CSÉPÁNYI¹, ANNA HARKAINÉ BEDICS¹, MÁRTON PÁPAI¹, TIBOR BENEDEK¹, BALÁZS KRISZT², ANDRÁS TÁNCICS¹

REVEALING THE STRUCTURE OF PHARMACEUTICAL COMPOUND-DEGRADING MICROBIAL COMMUNITIES ENRICHED FROM CONTAMINATED RIVER SEDIMENT

¹Department of Molecular Ecology; ²Department of Environmental Safety, Institute of Aquaculture and Environmental Safety, Hungarian University of Agriculture and Life Sciences, Gödöllő, Hungary

12.10-12.15

EPP-6

SÁRA HANTI

PLANKTONIC BACTERIAL COMMUNITIES OF A LARGE STEPPE LAKE, LAKE VELENCE (HUNGARY)

Department of Microbiology, Faculty of Science, ELTE-Eötvös Loránd University, Budapest, Hungary

12.15-12.20

EPP-7

◆ANNA HARKAINÉ BEDICS¹, MILÁN FARKAS¹, ERZSÉBET BAKA¹, PÉTER HARKAI², ANDREA CSÉPÁNYI¹, BALÁZS KRISZT², ANDRÁS TÁNCICS¹

INVESTIGATION OF MICROAEROBIC BENZENE-DEGRADING BACTERIAL COMMUNITIES BY A STABLE ISOTOPE PROBING (SIP) APPROACH

¹Department of Molecular Ecology; ²Department of Environmental Safety, Institute of Aquaculture and Environmental Safety, Hungarian University of Agriculture and Life Sciences, Gödöllő, Hungary

12.20-12.25

EPP-8

◆FLÓRA BOGLÁRKA HORVÁTH¹, TAMÁS MIREISZ², RÓZSA FARKAS¹, ERIKA TÓTH¹

BACTERIA DEGRADING XENOESTROGENS (ISOLATION, IDENTIFICATION AND TESTING)

¹Department of Microbiology, Faculty of Science, ELTE-Eötvös Loránd University; ²Budapest Waterworks Ltd., Budapest, Hungary

13.00- Closing Sentences, and Farewell Drink

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