

- 15:10–15:25 **János András Mótyán, Nikolett Szűcs, Csenge Anna Szarvas, József Tózsér**  
CHARACTERIZATION OF E26H MUTANT SCHISTOSOMA JAPONICUM GLUTATHIONE S-TRANSFERASE (SJGST) AND ITS PURIFICATION WITH METAL ION AFFINITY CHROMATOGRAPHY  
*UD DBPD Faculty of Dentistry, Hungary*
- 15:25–15:40 **Noémi Miltner, Tamás Richárd Linkner, Viktor Ambrus, János András Mótyán, József Tózsér, Mohamed Mahdi**  
SARS-COV-2 SPIKE PROTEIN-INDUCED EARLY SUPPRESSION OF ANTIVIRAL HOST RESPONSE AND PROTOCADHERINS IN MONOCYTE-DERIVED MACROPHAGES  
*UD DBMB FM Laboratory of Retroviral Biochemistry, Hungary; UD Doctoral School of Molecular Cell and Immune Biology, Hungary*
- 15:40–15:45 **Closing remarks**  
**Prof. Dr. István Pócsi**
- 15:45–16:30 **RECEPTION AND POSTER SESSION**

#### PROJECT CLOSING SESSION

**DAB Csokonai Terem**  
(DAB Headquarters Building)

**NKFIH 2018-1.2.1-NKP-2018-00002 – ESTIMATION OF THE LONG- AND SHORT-TERM EXPOSURE OF HUNGARIAN CONSUMERS TO AFLATOXINS PRESENT IN DAIRY PRODUCTS AND RECOMMENDING RISK MANAGEMENT MEASURES**

*Moderators: Attila Nagy, Zoltán Győri*

- 16:30–16:40 **Walter P. Pfliegler, Veronika Bodnár, Tünde Pusztahelyi, István Pócsi**  
PHYLOGENOMIC AND COMPARATIVE GENOMIC ANALYSIS OF ASPERGILLUS FLAVUS ISOLATES  
*UD DMBM IB Faculty of Science and Technology Hungary*
- 16:40–16:50 **Andrea Zentai, Ákos Bernard Józwiak, Zsuzsa Farkas**  
CARRY-OVER OF AFLATOXINS FROM FEED TO COW MILK – A REVIEW  
*UVM Digital Food Institute, Hungary*
- 16:50–17:00 **Ferenc Peles, Béla Béri, Péter Sipos, Tünde Pusztahelyi, István Pócsi, Zoltán Győri**  
AFLATOXIN CONTAMINATION OF RAW MILK: SOURCES, REASONS AND RISK MITIGATION OPPORTUNITIES  
*UD FAFSEM Institute of Food Science, Hungary*
- 17:00–17:10 **Zsuzsa Farkas, Kata Kerekes, Árpád Ambrus, Miklós Süth, Ferenc Peles, Tünde Pusztahelyi, István Pócsi, Attila Nagy, Péter Sipos, Gabriella Miklós, Anna Lőrincz, Szilveszter Csorba, Ákos Bernard Józwiak**  
PROBABILISTIC MODELING AND RISK CHARACTERIZATION OF THE CHRONIC AFLATOXIN M1 EXPOSURE OF HUNGARIAN CONSUMERS  
*UVM Digital Food Institute, Hungary*

- 17:10–17:20 **Krisztina Molnár, Csaba Rácz, Tamás Dövényi-Nagy, Tünde Pusztahelyi, Károly Bakó, István Pócsi, Attila Dobos**  
THE EFFECT OF AGROECOLOGICAL FACTORS ON TOXIN PRODUCTION BY ASPERGILLUS FLAVUS  
*UD FAFSEM Centre for Precision Farming R&D Services, Hungary*

#### 17:20–17:30 Discussion

#### WE ARE ALSO CELEBRATING:

- Biotechnologist educational program started 35 years ago at the University of Debrecen
- The first Master degrees in Biotechnology were awarded 10 years ago
- The first BSc students in biotechnology were enrolled at UD in 2022

#### SPONSORS OF THE EVENT



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## INVITATION



UNIVERSITY OF DEBRECEN

Faculty of Science and Technology, Department of Molecular Biotechnology and Microbiology, Institute of Biotechnology and

Faculty of Agricultural and Food Sciences and Environmental Management, Central Laboratory of Agricultural and Food Products and

Faculty of Agricultural and Food Sciences and Environmental Management, Centre for Agricultural Genomics and Biotechnology

respectfully invite you to the

## Biotechnology at the University of Debrecen – 2022 International Symposium

**10 November, 2022**

*Patron of the event:*  
Prof. Dr. Zoltán Bács  
Chancellor of the University of Debrecen

*Venue:*  
**DAB Székház Bognár Rezső Terem**  
(DAB Headquarters Building)  
4032 Thomas Mann str. 49.



- Tudomány: út a világ megismeréséhez -

**9:00 Registration**

### Organizing Committee

**István Pócsi** professor UD FST Department of Molecular Biotechnology and Microbiology

**Tünde Pusztahelyi** professor, UD FAFSEM Central Laboratory of Agricultural and Food Products

**Judit Dobránszki** scientific adviser, UD FAFSEM Centre for Agricultural Genomics and Biotechnology

**Szilvia Kusza** professor UD FAFSEM Centre for Agricultural Genomics and Biotechnology

**Tamás Emri** professor, UD FST Department of Molecular Biotechnology and Microbiology

**Dávid Domonkos** senior research fellow UD FST Institute of Biotechnology

**János András Mótyán** senior lecturer UD DBMB Faculty of Medicine

### Introduction

9:30–9:35 **Prof. Dr. István Pócsi**

### Official opening

9:35–9:45 **Prof. Dr. József Tózsér** Vice Rector of Sector Development, responsible for Life Sciences, University of Debrecen

### SESSIONS

#### Session I. MYCOTOXIN RESEARCH

Moderators: Nancy P. Keller, István Pócsi

9:45–10:15 **Milton Drott, Kunlong Yang, Nancy P. Keller**  
INSIGHTS INTO THE PROPENSITY OF AFLATOXIN SYNTHESIS THROUGH MOLECULAR AND POPULATION GENETICS  
*UW Department of Medical Microbiology and Immunology, Department of Plant Pathology, USA*

10:15–10:30 **Erzsébet Fekete, Ákos P. Molnár, Michel Flippi, Nancy P. Keller, Levente Karaffa**  
THE TECHNOLOGICAL CONDITIONS THAT FACILITATE FUNGAL BETA-LACTAM PRODUCTION MAY ALSO FAVOUR MYCOTOXIN FORMATION  
*UD DBE Faculty of Science and Technology, Hungary; UD Institute of Metagenomics, Hungary*

10:30–10:45 **Éva Leiter, Tamás Emri, Tünde Pusztahelyi, Zsuzsa Szabó, Klaudia Pákozdi, Eszter Virág, Beatrix Kocsis, Veronika Bodnár, László Hornok, István Pócsi**  
ATF1 ORTHOLOG BZIP-TYPE TRANSCRIPTION FACTORS IN FILAMENTOUS FUNGI  
*UD DMBM IB Faculty of Science and Technology, Hungary; ELRN-UD Fungal Stress Biology Research Group, Hungary*

10:45–11:00 **István Pócsi, Attila Nagy**  
NKFIH 2018–1.2.1–NKP–2018–00002 – A CONSORTIAL, MULTIDISCIPLINARY AFLATOXIN PROJECT  
*UD DMBM IB Faculty of Science and Technology, Hungary; ELRN-UD Fungal Stress Biology Research Group, Hungary*

11:00–11:15 **Tünde Pusztahelyi, Szilvia Kovács, Cintia Adácsi, Ida Miklós, Attila Dobos, Zoltán Győri, K. Madhavan Nampoothiri, István Pócsi**  
BIOLOGICAL CONTROL AND ELIMINATION OF MYCOTOXINS IN FOOD AND FEED  
*UD FAFSEM Central Laboratory of Agricultural and Food Products, Hungary*

11:15–11:40 **COFFEE BREAK AND POSTER SESSION**

#### Session II. AGRICULTURAL BIOTECHNOLOGY

Moderators: K. Madhavan Nampoothiri, Judit Dobránszki

11:40–12:10 **K. Madhavan Nampoothiri, S. Vipin Krishnan, Anandhu Suresh**  
ANTIFUNGAL ATTRIBUTES OF PROBIOTIC LACTIC ACID BACTERIA  
*Microbial Processes and Technology Division, CSIR– National Institute for Interdisciplinary Science and Technology, India*

12:10–12:25 **Judit Dobránszki, Norbert Hidvégi, Andrea Gulyás, Georgina Pesti-Asbóth, Piroska Bíróné Molnár, Ildikó Forgács, Judit Remenyik**  
ULTRASOUND ENHANCES PLANT GROWTH AND DEVELOPMENT BY ALTERING THE DNA METHYLATION, MRNA TRANSCRIPTION AND HORMONAL BALANCE  
*UD FAFSEM Centre for Agricultural Genomics and Biotechnology, Hungary*

12:25–12:40 **Miklós Fári, Szilvia Veres**  
BIOREGENERATIVE LIFE-SUPPORT FACILITIES AT THE BIODROME OF THE UNIVERSITY OF DEBRECEN FOR SPACE PLANT RESEARCH  
*UD FAFSEM Department of Applied Plant Biology, Institute of Crop Sciences, Hungary*

12:40–13:55 **Éva Domokos-Szabolcsy, Szilvia Veres, Szilvia Kovács, Nóra Bákonyi, Péter Makleit, Nevien Elhawat, Zoltán Kovács, László Kaszás, Tarek Alshaal, Miklós Fári**  
FROM CROPS IN FIELD TO SPACE PLANTS GROWN IN GROUND BIOREGENERATIVE LIFE-SUPPORT FACILI-

TIES: THE POTENTIAL OF GREEN BIOREFINING WITH REFLECTING THE ENVIRONMENTAL CHALLENGES  
*UD FAFSEM Department of Applied Plant Biology, Institute of Crop Sciences, Hungary*

13:55–14:10 **Bettina Hegedűs, Zoltán Bagi, Bianka Tóth, Katalin Balog, Bence Galik, Péter Urbán, Attila Samu, Milán Fehér, Péter Bársony, Szilvia Kusza**  
RESEARCH FOR THE DEVELOPMENT OF THE HUNGARIAN FISHING SECTOR  
*UD FAFSEM Centre for Agricultural Genomics and Biotechnology, Hungary*

#### SESSION III. PHARMECEUTICAL BIOTECHNOLOGY

Moderators: István Molnár, János András Mótyán

14:10–14:40 **István Molnár, Chen Wang, Dongliang Xiao, Baoqing Dun, and Yuquan Xu**  
DISCOVERY OF A NEW NONRIBOSOMAL PEPTIDE FAMILY WITH ANTIPROTOZOAL ACTIVITY FROM FILAMENTOUS FUNGI USING CHEMOMETRICS AND GENOME MINING  
*VTT Technical Research Centre of Finland, Finland*

14:40–14:55 **Zsuzsanna Szabó, József Király, Gábor Kónya, Krisztián Szegedi, Gábor Halmos**  
EXPRESSION OF MIRNAS AND ANGIOGENESIS MARKERS IN HUMAN KIDNEY CANCER  
*UD FP Department of Biopharmacy, Hungary*

14:55–15:10 **József Bakó, Ferenc Tóth, Loránd Csámer, Lajos Daróczi, Mónika Béresová, György Trencsényi, Botond Gaál, Róbert Boda, Dóra Horváth, Csaba Hegedűs**