

**Prof. Dr.-Ing. Dr.h.c. mult János J. Bogárdi** University of Bonn, Germany

Active in different areas of water resources management, water education and awareness raising, disaster risk assessment and environmental migration.

Senior fellow, Center for Development Research, University of Bonn, Germany, distinguished adjunct professor, Asian Institute of Technology, Pathumthani, Thailand, senior scientific advisor Institute of Advanced Studies. Kőszeg, Hungary, visiting professor, Universidad Autonoma del Estado de Hidalgo, Pachuca, Mexico. Since 1 August

2023 research professor National University for the Public Service, Budapest.

Title of presentation: One World, One Water Cycle, One Health: Examples how to tackle this global challenge



**Dr. Levente Czeglédi,** University Professor University of Debrecen, Hungary

Graduated as an agronomist, conducted PhD studies in animal science and recently Head of Department of Animal Science, leader of technical efficiency knowledge area at Resilience for Dairy H2020 programme.

He is working as task leader in livestock and poultry research programmes focusing on proteomic approaches to reveal the molecular background of efficient meat and milk production and product quality.

Title of presentation: Exploring the Interplay of Microbiome, Proteome, and Animal Health



**Dr. Judit Dobránszki**, scientific advisor University of Debrecen, Hungary

Biologist, with a special degree in plant genetics and breeding, Doctor of the Hungarian Academy of Sciences. Currently, she is the head of the Centre for Agricultural Genomics and Biotechnology.

She has professional experience in plant micropropagation, virus elimination, in vitro regeneration research of herbaceous and woody plant species, as well as in the development of *in vitro* methods supporting plant breeding. She has more than 100 international

publications and a patent.

Her current activities include:

•Researches on the effects of cytokinins and mechanical forces on in vitro, tissue cultured plants; and the effect of mechanical forces under field conditions.

- •Examination of epigenetic changes in different environments, and plant transcriptomic studies in response to abiotic stress.
- Research on plant memory.

**Title of presentation**: Plant memory and its exploitation possibilities for innovative strategies for growing healthy plants



**János Józsa,** Civil engineer Budapest University of Technology and Economics, Hungary

Specialised in hydraulic engineering, graduated at the Technical University of Budapest in 1981. PhD degree in 1993, professor since 2003, head of department 2004-2016, rector of Budapest University of Technology and Economics 2015-2021, rector emeritus since then. Member of the Hungarian Academy of Sciences (HAS) since 2019, Chairman of the Division of Engineering Sciences 2020-2023. Chairman of the Steering Committee of the National Water Science Programme of HAS and that the Water Science

and Security National Laboratory. Leader of a number of national and international research projects. Fields of expertise are fluvial and lake hydrodynamics, shallow waters, compound channels with floodplains, turbulent mixing, field measurements and numerical modelling.

**Title of presentation:** On current multidisciplinary challenges in water management: selected Hungarian case studies



**Prof. Norbert Lukáč,** University Professor Slovak University of Agriculture in Nitra (SUA), Slovak republic.

In research and teaching, he is devoted to the physiology of cells and animals, and their expression after stimulation with biotic and xenobiotic substances. He is currently focused on observing and modelling signalling pathways and the immune response of cells in vitro induced by endocrine disruptors. He is the author or co-author of four monographs, three university textbooks, 180 publications (WoS Core Collection), more than 1,954 citations, H index 25.

Lectured at important foreign conferences in China, Malaysia, Mexico, Poland, Hungary, Serbia, Italy, Portugal. He completed postgraduate studies in the field of subcellular biology and immunology at the University of Veterinary Sciences in Budapest, as well as short-term and long-term research stays at universities in Hungary, Poland, Austria, Switzerland, and Italy.

Was or is the principal investigator of 6 VEGA projects, 3 KEGA projects, 3 SRDA, and project coordinator of two projects of SF EU.

Title of presentation: Potential ability of endocrine disruptors to affect the living system – an in vitro study



**Gabrijel Ondrasek,** Full Professor University of Zagreb, Faculty of Agriculture, Croatia

With over 20 years of experience at the University of Zagreb, Faculty of Agriculture, he has served as the head of the Department of Soil Amelioration for more than 10 years. Currently, he coordinates international Master's study - <a href="https://bit.ly/INTER-ENAGRO">https://bit.ly/INTER-ENAGRO</a>, and participates in numerous councils, committees and boards. With a research focus on sustainable soil and water management in agroecosystems, salinization, and metal contamination processes,

he has spent over 35 months at prestigious research and academic institutions in Australia, Europe, and Latin America. He edited four scientific books and eight special issues in scientific journals, published 17 book chapters, and over 100 peer-reviewed articles.

**Title of presentation:** <u>Salinization & metal contamination in agroecosystems: Implications to food</u> safety & security



**Dr. Melinda Paholcsek,** Lecturer University of Debrecen, Hungary

Melinda spearheads pioneering research in various microbiomes through molecular biology techniques. Primary research areas encompass: i) Comprehensive taxonomic and functional analysis of diverse microbiomes. Notably, they specialize in soil microbiome assessments to support sustainable soil management and land use practices. ii) Development of microbial indicator-based models for predicting degradation dysbiosis, susceptibility to infections, and

diseases. iii) Innovating air microbiome-based monitoring. iv) Exploring the impact of microbial biogeography on terroir. v) Investigating antibiotic-resistant microbe (ARM) reservoirs in built (e.g., livestock) and natural environments. vi) Evaluating the contribution of high-value, residue-free products from intensive systems to combat acquired antimicrobial resistance. Examining the interconnectedness of environmental, animal, and human microbiomes in the "One Health" framework. Dr. Paholcsek's multidisciplinary team employs holistic, systems-based approaches that merge the expertise of molecular biologists, bioinformaticians, and biostatisticians.

Title of presentation: Exploring the Interplay of Microbiome, Proteome, and Animal Health



**Dr Gabriella Pocsfalvi**, Research Director National Research Council of Italy (CNR)

Dr. Pocsfalvi is head of the Extracellular Vesicles and Mass Spectrometry (EVs-MS) research group at the Institute of Biosciences and BioResources. She is author of more than 100 publications and 3 patent applications. Dr. Pocsfalvi has started her research carrier as a theoretical and computational chemist at the KLTE University in Debrecen, Hungary and as a post. doc she moved to CNR, Italy. Her research interest is on the production and engineering of Extracellular Vesicles from green and

sustainable sources. She is the coordinator of FarmEVs, SCOBY Do and EV-C@p projects and R&D manager of EVE biofactory spin off company.

**Title of the presentation:** <u>Plant's Nanoworld: Emerging Extracellular Vesicles and Nanovesicles for Enhancing One Health System</u>



**Dr. Judit Remenyik**, Scientific Advisor University of Debrecen, Hungary

Chemist, with a special degree in plant and human biochemistry. Currently, she is the head of the Center of Complex Systems and Microbiome Innovations.

She has professional experience: Verification of the physiological effect of plant active substances in in vitro endothelial tissue culture, in in vivo small animal experiments and in human studies. She is expert of development of food with high added value and the development of feed additives for single-cavity farm animals. She has more than 100 international

publications and a patent.

Her current researches include:

- Effect of tart cherry anthocyanins in oral health.
- •The role of sour cherries in the regulation of the transulfuration pathway.
- •The role of cherries in transgenerational epigenetics.

**Title of presentation:** <u>Inherited diseases and inherited health: how transgenerational epigenetics can change the processes?</u>



**Zed Rengel,** University Professor Soil Science and Plant Nutrition, University of Western Australia

Received BSc (Biology) and MSc (Cell biology) from University of Zagreb, PhD (agronomy, botany) from Louisiana State University, and Doctor Honoris Causa from Zagreb University. He is Editor-in-Chief of *Crop & Pasture Science, Plants* section of *Biology*, and *Advances in Environmental and Engineering Research*. He is a Highly Cited Researcher (Clarivate Analytics). Zed works on soil-plant-microbe interactions.

Title of presentation: Dynamics of phosphorus in the soil-plant-human continuum



**Dr. Nora Vass,** Assistant Professor University of Debrecen, Hungary

Veterinary surgeon, resident of the European College of Animal Reproduction, currently working in the Insitute of Animal Science, Biotechnology and Nature. She has professional experience in ruminant reproduction and biotechnology, with a special interest in small ruminant assisted reproductive techniques. She is also involved in research and practical work in small ruminant health and parasitology.

## **Current activities:**

- improving the efficiency of small ruminant assisted reproductive work (multiple ovulation and embryo transfer, laparoscopic artificial insemination, sperm and embryo freezing, in vitro techniques)
- research on stress response of the animals during different surgical methods
- research on small ruminant internal parasites (prevalence, diagnostics, treatment protocols, pasture management)

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