



41st International Congress of the Society for Microbial Ecology in Health and Disease (SOMED)

14-15-16 JUNE 2022

Alexandroupolis, Greece

At

Astir Egnatia Alexandroupolis, Egnatia Park,
68100 Alexandroupoli, Thrace, Greece



microorganisms

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biomedicines

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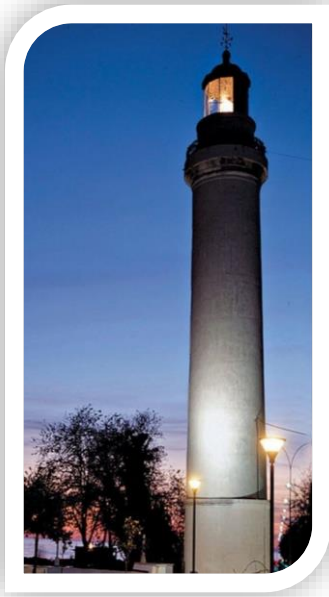
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Thrace is an area of amazing natural beauty; a land where Greek legend has placed the mythical home of Orpheus. Its pristine and beautiful countryside makes Thrace a great destination for outdoor recreation, adventure and exploration. Few of Thrace's natural landmarks include the Rhodopi mountain range and Mt. Saos on Samothrace Island; the rivers Evros, Nestos and Ardas; Dadia forest and the Evros River Delta where internationally acclaimed wetlands are located; fertile valleys, dense forests and endless stretches of white sandy beaches.

Co-organized by:

Society for Microbial Ecology and Disease

Democritus University of Thrace

Food Innovation, Research Infrastructure

FOODBIOMES, Research Infrastructure

Risk and Resilience Assessment Center (RiskAC-DUTH)

Municipality of Alexandroupolis

Prefecture of Eastern Macedonia - Thrace



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1st day 14 JUNE 2022

9:00-9:30 Registration**9:30-11:00 ROUND TABLE: New Insights into the Microbiota in Health and Disease**

co- organized with FOOD INNOVATION Research Infrastructure and the Master's program of 'Food, Nutrition and Microbiome' DUTH

Chair: Evangelos Giamarellos, Eugenia Bezirtzoglou,

- **Prof. Gilbert Greub, Centre Hospitalier Universitaire Vaudois (CHUV) and University of Lausanne, Lausanne, Switzerland**
 - The human microbiota: new methods and novel applications.
- **Prof. Evangelos Giamarellos, National Kapodistrian University of Athens, Medical School, Department of Internal Medicine, Attikon University Hospital, Athens, Greece**
 - New insights in the pathogenesis and management of *C. difficile*.
- **Prof. Benoit Guery, Centre Hospitalier Universitaire Vaudois(CHUV) and University of Lausanne, Lausanne, Switzerland**
 - Microbiota and *Clostridioides difficile* infection: do we understand what we do?
- **Prof. Nadiya Boyko, Faculty of Medicine, Uzhhorod National University & Cassovia Life Science, R&D Centre of Molecular Microbiology and Mucosal Immunology, Uzhhorod, Ukraine**
 - Clinical value of the human microbiome detection and targeted correction in the exact diagnostic and 3P medicine practical implementation.

Break 11:00-11:15**11:15-12:15 ROUND TABLE: Microbiome as a key player in specific disorders**

co- organized with FOOD INNOVATION Research Infrastructure and the Master's program of 'Food, Nutrition and Microbiome' DUTH

Chair : Dimitrios Bogdanos, Christina Tsigalou

- **Prof. Dimitrios Bogdanos, Faculty of Medicine, University of Thessaly, Larissa, Greece**
 - Microbiome, immunity, autoimmunity: the Gordian knot.
- **Assoc Prof. Paschalis Steiropoulos, Department of Pneumology, Faculty of Medicine, Democritus University of Thrace, Alexandroupolis, Greece**
 - The role of microbiome in idiopathic pulmonary fibrosis.
- **Prof. Reet Mändar, Institute of Biomedicine and Translational Medicine, Department of Microbiology, University of Tartu, Estonia**
 - Reproductive tract microbiota in the couples going to ART procedure.

12:15-13:15 ORAL PRESENTATIONS

co- organized with FOOD INNOVATION Research Infrastructure and the Master's program of 'Food, Nutrition and Microbiome' DUTH

Chair: Evangelia Nena, Paschalis Steiropoulos

- **Gratiela Gratisteanu, Department of Biology, University of Bucharest and ICUB, Bucharest, Romania**
 - Exploring the gut lung axis in Covid-19.
- **Luminita Marutescu, Alexandru E., Marcela Popa, Elena Dragu, Diana Antonia Costea, Marian Nicolae, Carmen Chifiriuc, Veronica Lazar, Raluca Grigore, Petronela Ancuta, Department of Biology, University of Bucharest and ICUB , Bucharest, Romania**
 - SARS-CoV-2 Humoral and Cellular Immunity in a Cohort of Patients with Head and Neck Carcinoma.
- **Elisavet Stavropoulou , Nikolaos Remmas, Chrysoula Voidarou, Georgios Rozos, Zacharias Tsakris, Natalia Vaou, Theodoros C. Constantinidis, Georgia Vrioni, Spyridon Ntougias and Athanasios Tsakris. Centre Hospitalier Universitaire Vaudois (CHUV), University of Lausanne, Lausanne, Switzerland and National Kapodistrian University of Athens, Medical School, Department of Microbiology, Athens, Greece**
 - Unveiling antimicrobial activity of honey.
- **Andreas Tzakos, Eirinaios I. Vrettos, Department of Chemistry, Section of Organic Chemistry and Biochemistry, University of Ioannina, Department of Chemistry, Greece**
 - Development of antimicrobial dressings for wound healing.

13:30-15:00 Lunch (Poster Session I)

15:00 –17:30 ROUND TABLE: Microbiome and COVID-19

co- organized with FOOD INNOVATION Research Infrastructure and the Master's program of 'Food, Nutrition and Microbiome' DUTH

Chair: Athanasios Tsakris, Tore Midtvedt

- **Prof. Tore Midtvedt Karolinska, Department of Microbial Ecology, Karolinska Institutet, Stockholm, Sweden**
 - Covid-19 and the gut microbiota.
- **Prof. Athanasios Tsakris, National Kapodistrian University of Athens, Medical School, Department of Microbiology, Athens, Greece**
 - Vaccinations, infections and reinfections: Can we break the cycle?
- **Prof. Ekaterini Alexiou Chatzaki, Democritus University of Thrace, Medical School, Department of Pharmacology, Greece**
 - Big data analyses drive clinical decisions: the example of COVID-19.
- **Assoc. Prof. Evangelia Nena, Department of Social Medicine, Medical School , Democritus University of Thrace, Alexandroupolis, Greece**
 - Epidemiology of COVID-19.
- **Prof. Athanasios Tsiftaris Ex-Minister, Agriculture Department, Aristotle University of Thessaloniki, Thessaloniki, Greece**
 - Life as an RNA: The coronavirus pandemic and the environmental role.

17:30-18:30 ORAL PRESENTATIONS

co- organized with *FOOD INNOVATION Research Infrastructure and the Master's program of 'Food, Nutrition and Microbiome' DUTH*

Chair: Chrysoula Voidarou, Christina Tsigalou

- *Lia-Mara Ditu, Ionela Avram, Irimia Denisa, Carmen Curuțiu, Alina Holban, Carmen Chifiriuc, Petronela Ancuta, Veronica Lazar, Department of Biology, University of Bucharest and ICUB, Bucharest, Romania*
 - Humoral immunity in response to SARS-CoV-2 vaccines and natural infection in a cohort of healthy people.
- *Corina Casangiu, Dan Otelea, Simona Paraschiv, Marius Surleac, Leontina Banica, Ovidiu Vlaicu, Dragos Florea, Robert Hohan, Carmen Mariana Chifiriuc*
 - COVID-19 epidemiology in Romania.
- *Georgia Saxami, Evangelia N. Kerezoudi, Evdokia K. Mitsou, Maria Anastasopoulou, Marigoula Vlassopoulou, Georgios Koutrotsios, Georgios I. Zervakis, Adamantini Kyriacou, Harokopion University, Department of Nutrition and Dietetics and Agricultural University of Athens, Faculty of Crop Science, Athens, Greece*
 - *In vitro* prebiotic potential of *Pleurotus eryngii* mushrooms on faecal bacterial populations, gut barrier and inflammatory status in autistic children.
- *Georgios Vakadaris, Christos Stefanis, Elpida Giorgi, Yannis Kourkoutas, Christina Tsigalou, Eugenia Bezirtzoglou, Laboratory of Hygiene and Environmental Protection, Medical School, Democritus University of Thrace, Alexandroupolis, Greece*
 - The role of probiotics in inducing and maintaining remission in inflammatory bowel diseases (IBS).
- *Konstantinos Konstantinidis, Nikolas Dovrolis, Adamantia Kouvela, Katerina Kassela, Maria Goreti Rosa Freitas, Maria Bampali, Elisavet Gatzidou, Andreas Nearchou, Michael de Courcy Williams, Stavroula Veletza, Ioannis Karakasiliotis, Laboratory of Biology, Department of Medicine, Democritus University of Thrace, Dragana, Alexandroupolis, Greece, Laboratório de Mosquitos Transmissores de Hematozoários, Instituto Oswaldo Cruz-Fiocruz, Pavilhão Carlos Chagas, Avenida Brasil, Geotechnoygeionomiki O.E, Xanthi, Greece*
 - Defining virus-carrier networks that shape the composition of mosquitoes' and biting midges' core virome of a local ecosystem.

18:30-19:00 SOMED Board Meeting**21:00 Opening Ceremony: University and Local Authorities*****Welcome speech from***

Rector of DUTH, *Professor Alexandros Polychronidis*

Regional Governor of East Macedonia and Thrace, *Christos Metios*

Mayor of the city of Alexandroupolis, *Ioannis Zaboukis*

Dean Medical School DUTH, *Professor Michail Pitiakoudis*

SOMED Congress President, Medical School DUTH, *Professor Eugenia Bezirtzoglou*

Penny Retsa

Market Access & External Relations Director, AbbVie Greece

"The benefits of pharmaceutical innovation for the patients, the healthcare system and the national economy"

2nd day 15 JUNE 2022**9:00-9:45 ORAL PRESENTATIONS**

co- organized with FOOD INNOVATION Research Infrastructure and the Master's program of 'Food, Nutrition and Microbiome' DUTH

Chair: Christos Kontogiorgis, Georgios Rozos

- *Aikaterini Nelli, Chrysoula Voidarou, Ioannis Skoufos, Anastasios Tsinas, Konstantina Fotou, Eleftherios Bonos, Evangelia Gouva, Çağlar Ersanli, Athina Tzora, University of Ioannina, Agriculture Department, Arta, Greece*
 - Prevalence and antimicrobial-resistance phenotypes of *Staphylococcus spp.* isolated from dairy goat farms.
- *Birce Mercanoglu Taban, Vasemin Numanoglu Cevik, H. Ceren Akal Demirdogen, Nazli Kanca, Dairy Technology Department, Faculty of Agriculture, Veterinary and Agriculture Campus, Ankara University and Reference Laboratory and Biological Products Department, General Directorate of Public Health, Ministry of Health, Ankara, Turkey*
 - MALDI-TOF MS characterization of lactic acid bacteria isolated from traditional artisanal cheeses of Turkey.
- *Ioannis Skoufos, Aikaterini Nelli, Eleftherios Bonos, Chrysoula Voidarou, Ilias Lagkouvardos, Anastasios Tsinas, Konstantina Fotou, Evangelia Gouva, Achilleas Karamoutsios, Athina Tzora, University of Ioannina, Agriculture Department, Arta, Greece*
 - A “crosstalk” between the feeding strategy of dairy sheep and the microbiota of produced kefalograviera cheese.
- *Argyrios Dermatas, Georgios Rozos, Chrysoula Voidarou, Konstantoula Akrida – Demertzi, Panagiotis G. Demertzis, University of Ioannina, Department of Chemistry, Section of Industrial and Food Chemistry, Food Chemistry Lab., Ioannina and Department of Agriculture, School of Agriculture, University of Ioannina and Veterinary Directorate of Cyclades, South Aegean Region, Syros, Greece*
 - Isolation of *Campylobacter* strains from poultry (*Gallus gallus domesticus*) beddings in rural households using selective media.

9:45-11:00 Risk and Resilience Assessment Center –Prefecture of East Macedonia and Thrace - Greece (RiskAC-DUTH) & One Health

co- organized with KEDIAK (RiskAC-DUTH) Research Infrastructure.

Chair: Ioannis Dokas, Theodoros C. Constantinidis, Eugenia Bezirtzoglou

- *Ioannis Dokas, Associate Professor Democritus University of Thrace, Civil Engineering Department*
 - Presentation of KEDIAK (RiskAC-DUTH) Research Infrastructure.
- *Prof. Alkiviadis Vatopoulos, Department of Public Health Microbiology, School of Public Health, University of Western Attika, Athens, Greece*
 - One Health and Public Health.

- **Christos Zafeiridis, DVM, Official veterinarian (DVM), Mph - Phd Candidate: School of Public Health - University of W. Attica; Unit of Veterinary Drugs, Residues and Veterinary Supplies, Directorate of Animal Welfare, Veterinary Drugs and Applications, General Directorate of Veterinary Services, Ministry of Rural Development and Food, Athens,; Seconded National Expert to the European Commission - DG Health and Food Safety - Directorate G, Crisis management in food, animals and plants, Unit G3, Official Controls - Northern Ireland Liaison Team (NILT) and Panagiota Giakoupi, Alkiviades Vatopoulos, Emmanouil Papadogiannakis; School of Public Health - University of W. Attica; Greece**
 - Antimicrobial resistance Profiles of *Escherichia coli* from diarrheic weaned piglets in two Greek regions over a five-month period (March-July 2021).
- **Maria Linou, DVM, PhD, Hellenic Pasteur Institute, President of the Hellenic Veterinary Medical Society, General Secretary of the Hellenic Scientific One Health Society**
 - The one health initiative in companion animal and human interaction.
- **Chrysoula Voidarou, DVM, MD, PhD Assoc. Prof. University of Ioannina, Department of Agriculture, Arta, Greece**
 - Food Production: One Health, One safety and Environmental Sustainability.
- **Eleni Dotsika, DVM, PhD, ex. Director Pasteur Institute, Athens, Greece**
 - One health perspectives on natural disasters including pandemics.

11:15-11:30 Break

11:30 – 13:30 Risk and Resilience Assessment Center –Prefecture of East Macedonia and Thrace - Greece (RiskAC-DUTH) & One Health II

co- organized with KEDIAK (RiskAC-DUTH) Research Infrastructure

Chair: Ioannis Dokas, Spyridon Ntougias

- **Ioannis Dokas, Associate Professor Democritus University of Thrace, Civil Engineering Department**
 - The Risk and Resilience Assessment Center as a “Living” System: Utilizing Core Ideas from Systems Theory and Complex Adaptive Systems for Specifying its Management System.
- **Sofia Akrivopoulou, Kiriaki Keramitsoglou, Panagiotis Koudoumakis, Rodopi Papaevaggelou, and Angelos L. Protopapas, School of Civil Engineering, Democritus University of Thrace, Xanthi, Greece**
 - Biodiversity as an outstanding universal value for integrated management of natural and cultural heritage.
- **Ioannis Manisalidis, Christina Tsigalou, Theodoros C. Constantinidis, Eugenia Bezirtzoglou, Laboratory of Hygiene and Environmental Protection, Medical School, Democritus University of Thrace, Alexandroupolis, Greece**
 - Air traffic, air pollution and shifting impact on public health.
- **Assoc. Prof. Anastassia Paschalidou, Kyriaki Psistaki, Nikolaos Matzarides, Orestes Psaras-Leridis, Athanasios Damialis, Ioannis M. Dokas, Department of Forestry & Management of the Environment & Natural Resources, and Department of Civil Engineering, Democritus University of Thrace, Greece, and Institute of Environmental Medicine, UNIKA-T, Technical University of Munich and Helmholtz Zentrum München - German Research Center for Environmental Health, Augsburg, Germany**
 - Studying the levels of allergenic pollen from different anemophilous species in Kavala, Greece.

- *Giorgios Mallinis, Katerina Vatitsi, Vassileios Giannakopoulos, Anastasia Paschalidou, Ioannis Dokas, School of Rural and Surveying Engineering, Aristotle University of Thessaloniki, Thessaloniki and Department of Forestry and Management of the Environment and Natural Resources, Democritus University of Thrace, Greece*
 - Air quality monitoring during the 2021 wildfires in Greece using Copernicus data.

13:30–14:30 Lunch (Poster Session II)

14:30 –16:40 Session: Microbiome Applications in Food Systems FOOBIONES and FOOD INNOVATION Research Infrastructures I

co- organized with FOOBIONES and FOOD INNOVATION Research Infrastructures

Chair : Eugenia Bezirtzoglou, Marirena Grigoriou, Yiannis Kourkoutas

- *Yiannis Kourkoutas, Professor, Department of Molecular Biology and Genetics, Democritus University of Thrace, Alexandroupolis, Greece*
 - Presentation of FOOBIONES Research Infrastructure.
- *Eugenia Bezirtzoglou, Professor, Department of Medicine, Democritus University of Thrace, Alexandroupolis, Greece*
 - Presentation of FOOD INNOVATION Research Infrastructure.
- *George Paraskevakos, Executive Director International Probiotics Association*
 - Probiotics and the Microbiome; a synopsis of trends, regulations, and the market from the IPA desk.
- *Jin Mo Kang, CEO of Aura cooperation and Halo biome of South Korea, Expertise in strategic planning, Marketing and Regulatory Affairs*
 - The Gateway to Asian Markets!
- *Dr. Monika Kvaková, Center of Clinical and Preclinical Research MEDIPARK, Faculty of Medicine, P.J. Safarik University in Kosice, Slovakia*
 - Benefits of co-encapsulated synbiotics for healthy gut.
- *Marirena Grigoriou, Department of Molecular Biology & Genetics, Democritus University of Thrace, Greece*
 - Tools for assessing microbial biodiversity and function to accelerate the isolation of novel strains and the development of microbiome-based products and applications.
- *Petros Kolovos, Department of Molecular Biology & Genetics, Democritus University of Thrace, Greece*
 - Bacterial genomics reveal their properties.
- *Andreas Tzakos, Department of Chemistry, Section of Organic Chemistry and Biochemistry, University of Ioannina, Department of Chemistry, Greece*
 - Exploiting the plant biodiversity flora of Epirus for the development of novel bioproducts.

16:40 – 17:00 Break

17:00 –19:00 Session: Microbiome Applications in Food Systems FOOBIONES and FOOD INNOVATION Research Infrastructures II

co- organized with FOOBIONES and FOOD INNOVATION Research Infrastructures

Chair :Yiannis Kourkoutas, Andreas Tzakos

- ***Panoraia Bousdouni , Chrysoula Kaloteraki, Kalliopi Almpounioti, Panagiota Potsaki, Aikaterini Kandyliari and Antonios E. Koutelidakis, Unit of Human Nutrition, Laboratory of Nutrition and Public Health, Department of Food Science and Nutrition, University of the Aegean, Greece.***
 - Development, in vitro digestion analysis and organoleptic characterization of dairy products enriched with antioxidant extracts.
- ***Dr. Iliada Lappa, Nikoleta Albani, Aikaterini Natsia, Dimitra Alimpoumpa, Aikaterini Papadaki, Nikolaos Kopsahelis, Department of Food Science and Technology, Ionian University, Greece***
 - Putative probiotic features of wild-type LAB isolated from Feta-type cheese of Kefalonia island.
- ***Dr. Vasiliki Kachrimanidou, Dimitra Alimpoumpa, Eleftheria Trantou, Paraskevi Topalidou, Maria Alexandri, Aikaterini Papadaki, Nikolaos Kopsahelis, Department of Food Science and Technology, Ionian University, Greece***
 - Implementation of novel lactobacilli isolates from diversified sources for biosurfactants production.
- ***Amalia Yanni, PhD, Department of Nutrition and Dietetics, Harokopio University, Greece***
 - Dietary interventions in streptozotocin-induced diabetic rat.
- ***Ioanna Prapa, Vasiliki Kompoura, Amalia Yanni, Gregoria Mitropoulou, Evangelos Balafas, Panayiotis Panas, Nikolaos Kostomitopoulos, Vaios Karathanos, Eugenia Bezirtzoglou, Yiannis Kourkoutas, Department of Molecular Biology & Genetics, Democritus University of Thrace and Laboratory of Chemistry, Biochemistry, Physical Chemistry of Foods, Department of Nutrition and Dietetics, Harokopio University of Athens and Center of Experimental Surgery and Translational Research, Biomedical Research Foundation of the Academy of Athens and Laboratory of Hygiene and Environmental Protection, School of Medicine, Democritus University of Thrace, Alexandroupolis, Greece***
 - Immobilized probiotics on pistachio nuts as functional food ingredients to modulate intestinal microbiome in streptozotocin-induced diabetic rats
- ***Eirini Tsanidou, Evangelia Nena, Dimitrios Pagonidis, Elias Seretis, Stavroula Binopoulou, Theodoros C. Constantinidis, Department of Public Health and Social Assistance of Evros Prefecture, Region of East Macedonia & Thrace, Alexandroupolis, Greece and Laboratory of Hygiene and Environmental Protection, School of Medicine, Democritus University of Thrace, Alexandroupolis, Greece***
 - Prevalence of foodborne diseases and its relationship with the number of public health inspections carried out at health-regulated establishments of southern part of Evros Prefecture, Greece, during the period 2015-2019.

19:00 -19:15 Closing Remarks-Awards

- ◇ **Best Oral Presentation Awards by MDPI Journals**
- ◇ **Best Poster Presentation Awards by SOMED**

3rd day 16 JUNE 2022

Excursion to regional landmarks: Xanthi, Komitini, “Vergina” Brewery