

PROGRAMME
IX. MICROBIOLOGY SYMPOSIUM
"METAGENOMES OF VARIOUS ENVIRONMENTS"
UMCS, Lublin, 23 – 24 June, 2025

Symposium venue: Institute of Informatics, Maria Curie-Skłodowska University, 9 Akademicka St., Lublin, Hall D105

First day of the Symposium 23 June 2025 (Monday)	
8:00 - 9:00	Registration and Welcome Coffee Building of the Institute of Informatics of the Maria Curie-Skłodowska University, Lublin, 9 Akademicka Street, Hall D105
	OPENING SESSION
9:00 - 9:30	SYMPOSIUM OPENING CEREMONY – WELCOME WORD Greeting of guests by organizers and representatives of Honorary and Scientific Patrons, authorities of the Polish Society of Microbiologists, Maria Curie-Skłodowska University in Lublin, Faculty of Biology and Biotechnology of UMCS and authorities of co-organizing units as well as representatives of the city and provincial authorities
	INAUGURAL SESSION S Moderators leading the session: Prof. dr Stefan Tyski; Prof. dr Zofia Piotrowska-Seget; Prof. dr Adam Choma
9:30 - 10:10	INAUGURAL LECTURE I Prof. dr Dariusz Bartosik, University of Warsaw "The sound of silence..."
10:10 - 10:50	INAUGURAL LECTURE II Prof. dr Jaco Vangronsveld, Hasselt University, Belgium "The seed microbiome: its complexity, significance in plant life and possible applications"
10:50 - 11:15	Coffee break
	SESSION I Prokaryotic microbiome of different environments Moderators leading the session: Prof. Magdalena Frąc; Prof. Monika Janczarek; Dr Karolina Furtak
11:15 - 11:45	PLENARY LECTURE I "The lecture is carried out with the financial support of The City of Lublin, as part of the Visiting Professors in Lublin Program ". Prof. Dr Heribert Insam, University of Innsbruck "Microbes, climate and society" 
11:45 - 12:00	Presentation 1 Dr Slawomir Sulowicz, Krzysztof Zawierucha, Anna Markowicz, Krystyna Koziol, Wiktoria Zientak, Adam Nawrot, Krzesimir Tomaszewski, Bartłomiej Luks, Catherine Larose, University of Silesia in Katowice: „Microbial diversity of the snowpack in Spitsbergen”
12:00 - 12:15	Presentation 2 Dr Marta Potrykus, Monika Kurpas, Grażyna Gałązkowska, University of Gdansk: “Chemical contamination influence on beach sand microbiota”
12:15 - 12:30	Presentation 3 - participant in the competition for young scientists Lic. Daria Kaim, Franco Magurno, Izabela Potocka, Zofia Piotrowska-Seget, Piotr Siupka University of Silesia in Katowice: ”Comparative analysis of bacteriobiome structures in bottom sediments of water reservoirs with varying pollution levels in Upper Silesia”
12:30 - 12:45	Presentation 4 Dr Piotr Siupka, Adam Nadudvari, Ian Marshall, Tomasz Krzykawski, Hakim Rabia, Agnieszka Bylina, Leszek Marynowski, Zofia Piotrowska-Seget ,University of Silesia in Katowice: „Microorganisms at the limits of life: Insights into microbiome of thermally active coal waste dumps”
12:45 - 13:00	Presentation 5 Dr Małgorzata Pawlik, Kinga Bondarczuk, Magdalena Noszczyńska, Alicja Cwajna, Zofia Piotrowska-Seget, University of Silesia in Katowice: “Genome analysis of Cd-resistant endophytic bacteria and their impact on tomato root morphology”
13.00 - 13.15	Discussion
13:15 - 14:15	PHOTO of all Symposium participants (in front of the building of Institute of Informatics on the Maria Curie-Skłodowska square by the monument of Maria Curie-Skłodowska) LUNCH - HOTEL MERCURE, 12, Aleje Racławickie St., Lublin, about 200 m from the symposium venue

14:15 - 15:00	POSTER SESSION (<i>posters will be available throughout the conference</i>)
	SESSION II Eukaryotic microbiome of different environments Moderators leading the session: Prof. Dr Joanna Kruszewska; Dr Magdalena Szczech, Prof. of the Institute; Grzegorz Janusz, Ph.D., prof. of UMCS
15:00 - 15:30	PLENARY LECTURE II Prof. dr Małgorzata Jędryczka, IGR Poznań: "Metagenomes in decision support systems for plant protection"
15:30 - 15:50	INVITED LECTURE Anna Pikulicka, Prof. dr Wiesław Barabasz , National University of Applied Sciences in Przemyśl: "micro-RNA small molecules of great importance"
15:50 - 16:10	INVITED LECTURE Dr Lidia Błaszczuk , Institute of Plant Genetics, Polish Academy of Sciences: "Involvement of microRNA in the multidirectional interaction of wheat plants with <i>Fusarium</i> and <i>Trichoderma</i> fungi – preliminary observations)"
16:10 - 16:30	INVITED LECTURE Dr Sylwia Różalska, prof. UŁ: University of Lodz, "The role of secondary metabolites in the ecology of entomopathogenic fungi)"
16:30 - 16:45	Presentation 6 - participant in the competition for young scientists mgr Joanna Ziętra-Wysocka , Paulina Niedźwiedzka-Rystwej, Institute of Biology, University of Szczecin: "Analysis of the effect of chicory root on the gut microbiota of rabbits based on sequencing techniques"
16:45 - 17:00	Presentation 7 - participant in the competition for young scientists mgr Jakub Kuncewicz, mgr Maksymilian Chmielewski , Władysław Polocyn, Adam Mickiewicz University: "Interpretation of microbiome network clusters as functional groups"
17:00 - 17:10	Presentation by 3GENES (conference sponsor)
17:10 - 17:20	Discussion
19:00	GALA DINNER HOTEL MERCURE, 12, Aleje Racławickie St., Lublin, about 200 m from the symposium venue

Second day of the Symposium –24 June2025 (Tuesday).	
8:30 - 9:00	Welcome Coffee Building of the Institute of Informatics of the Maria Curie-Skłodowska University, Lublin, 9 Akademicka St., Hall D105
	Session III Metagenomes of the soil environment and their application in biotechnology Part 1: Metagenomes of the plant rhizosphere and their formation by microbiota interactions Moderators leading the session: dr hab. Andrzej Mazur, prof. UMCS; dr hab. Małgorzata Marczak, prof. UMCS; dr hab. Karolina Oszust, prof. Instytutu
9:00 - 9:30	PLENARY LECTURE III Prof. Dr Alessio Mengoni University of Florence: "When biodiversity meets biotechnologies: deciphering symbiotic nitrogen fixing rhizobia genotype x genotype interaction in the plant microbiome"
	REFERENCES
9:30 - 9:45	Presentation 8 -- participant in competition for young scientists Mgr Klaudia Peczyk, Monika Malicka, Piotr Siupka, Franco Magurno, Zofia Piotrowska-Seget University of Silesia in Katowice, Poland: "Decoding the potential of mycorrhiza helper bacteria: genomic insights and application for plant growth support in PAH-contaminated substrates"
9:45 - 10:00	Presentation 9 - participant in the competition for young scientists Dr Weronika Babińska-Wensierska, Sandra Kobierska, Agata Motyka-Poagruk, Ewa Łojkowska, University of Gdańsk: "The role of soil microbiota in the development of blackleg and soft rot symptoms in potato – identification of a natural antagonist bacteria from the genus <i>Paenibacillus</i> sp."
10:00 - 10:15	Presentation 10 Dr Dorota M. Krzyzanowska, Marcin Borowicz, Marta Sobolewska, Robert Czajkowski, University of Gdansk: "Tailocins as precision weapons in bacterial competition: a model based on plant pathogens from the Pectobacteriaceae family"
10:15 - 10:30	Discussion
10:30 - 11:00	Coffee break
	Session III Metagenomes of the soil environment and their application in biotechnology Part 2: Metagenomes and biotic and abiotic factors in shaping agroecosystems Moderators leading the session: Prof. dr Jadwiga Wyszowska, Prof. dr Jan Kucharski; Dr Anna Marzec-Grządziel
11:00 - 11:30	PLENARY LECTURE IV Prof. Dr Adriano Sofo, University of Basilicata, Italy "Interactions between microorganisms and plants in agroecosystems differentially managed: effects on soil health and crop production"
11:30 - 11:45	Presentation 11 Dr Agnieszka Domka, Maciej Gustab, Roman Jędrzejczyk, Rafał Ważny, Weronika Kosowicz, Piotr Rozpądek, Malopolska Center for Biotechnology, Jagiellonian University: "Interactions between host plants and microbial communities: implications for environmental adaptation"
11:45 - 12:00	Presentation 12 -- participant in competition for young scientists Mgr Adam Furtak, Anna Szafranek-Nakoneczna, Anna Pytlak, Institute of Agrophysics named after Bohdan Dobrzański, PAS: "Friend or foe - the reaction of methanotrophic communities of agricultural soils to glyphosate"
12:00 - 12:15	Presentation 13 Dr Sławomir Borymski, Wiktoria Paliga, Anna Markowicz, Krzysztof Sitko, Sławomir Sułowicz University of Silesia: "Biodiversity of rhizosphere microbial communities in the context of zinc accumulation by <i>Arabidopsis</i> metallophytes in soil contaminated with ZnO nanoparticles"
12:15 - 12:30	Presentation 14 - participant in the competition for young scientists Mgr Aleksandra Karpińska, Marcin Borowicz, Dorota M. Krzyzanowska, Sylwia Jafra, University of Gdansk: „Application of molecular biology methods in studying adhesion mechanisms in <i>Ochrobactrum</i> spp."
12:30 - 12:45	Discussion

12:45 - 14:00	LUNCH HOTEL MERCURE, 12, Aleje Racławickie St, Lublin, about 200 m from the symposium venue
	Session IV Application metagenomics, metabolomics, proteomics and their importance in environmental quality and human health monitoring Moderators leading the session: Prof. dr Izabela Korona-Głowniak; dr Agnieszka E. Laudy, dr Monika Jach
14:00 - 14:30	PLENARY LECTURE V Prof. dr François Rineau, Nier Su, Mwahija Zubery, Wouter Reyns, Maria Moreno-Druet, Nadia Soudzilovskaia U. Hasselt: "Exploring microbial shifts under climate change simulation".
	REFERENCES
14:30 - 14:45	Presentation 15 Dr Agnieszka Kuźniar, Anna Kruczyńska, Angelika Kliszczyk, Weronika Goraj, Artur Banach, Tomasz Lenard, Marcin Skowronek, Anna Sochaczewska, Agnieszka, Podlewski Jacek, Słomczewski Andrzej, Wolińska, Rafał Łopucki, Catholic University of Lublin: „Interactive environmental metabarcoding in microbial biodiversity research”
14:45 - 15:00	Presentation 16 Dr Ewa Oleńska, Wanda Małek, Anna Gałązka, Małgorzata Woźniak, S. Thijs, Małgorzata Wójcik, Jaco Vangronsveld, University of Białystok: “Bacterial microbiome of white clover (<i>Trifolium repens</i> L.) growing on the 130-yrs-old Zn-Pb-Cd waste heap in southern Poland”
15:00 - 15:15	Presentation 17 - participant in the competition for young scientists Mgr Paula Rożen, Francesc Coll, Karol Makuch, Marta Zapotoczna, University of Warsaw: “Genetic determinants of <i>Staphylococcus aureus</i> adhesiveness to fibrinogen and fibronectin and associations between these phenotypes and patients’ manifestation”
15:15 - 15:30	Presentation 18 - participant in the competition for young scientists Mgr Aleksandra Horbowicz-Teresinska, , Martyna Moryl, Małgorzata Marczak, Maria Curie-Skłodowska University: “ Three enzymes – two reactions: functional analyses of three glycosyltransferases in the context of complex rhizobial exopolysaccharide biosynthesis”
15:30 - 15:45	Discussion
15:45 - 16:05	Coffee / technical break (discussion of the Competition Commissions evaluating presentations and posters of young scientists)
16.05 - 16:25	CONCLUDING LECTURE Prof. dr Adam Jaworski: “Human population metagenome”
16:25 - 17:00	Closing ceremony: AWARD PRESENTATION, SUMMARY AND CONCLUSION OF THE CONFERENCE