

## Benelux Metabolomics Days 2024, 5+6 September 2024, Ghent, Belgium

DAY 1: Thursday, September 5			
08:45 - 09:30	Arrivals + registration		
09:30 - 10:50	Session 1: The impact of Metabolomics on Nu	trition Research: Past, present & future	
-	Chair: Merlijn van Rijswijk and Lynn Vanhaecke		
9:30-10:10	Susan Sumner, University of North Caroline, USA	The Internal Exposome and Nutritional Pharmacology/Toxicology	
10:10-10:30	Thomas Skurk, TUM, DE	Effects of dietary fiber intervention on the gut microbiome and microbial TMAO production after beef consumtions: Insights from the MEATMARK study	
10:30-10:50	Annalisa Terranegra, Sidra Medicine, QA	Examining the association of lipid biomarkers and nutritional factors with the risk of cardiovascular disease in obese Qatari adults	
10:50-11:30	Coffee break -> Official start of the BMD 2024		
11:30-12:45	Session 2: The Exposome and the Microbiome		
	Chair: Adriana Carvalho de Souza, dsm-firmenich, NL		
11:30-11.35	Welcome from Netherlands Metabolomics Centre	By the NMC board	
11:35-12:05	Sarah De Saeger, Ghent University, BE	The FlexiGut-project	
12:05-12:25	Marthe De Boevre, Ghent University, BE	Internal exposure to multiple mycotoxins and their metabolites in plasma samples from Ethiopia and	
12:25-12:45	Emma Rowan, Dublin City University, IE	its potential impact on the incidence of esophageal cancer The water flea as a "canary in the coal mine" to understand pharmaceutical pollution - A metabolomic approach	
12:45-13:05	Pieter Van den Abbeele, Cryptobiotix, BE	Using the SIFR® technology and metabolomics to unravel the mechanism of action of microbiome- mediated products	
13:05-14:15	Lunch + poster session 1		
14:15-15:45	Session 3: Metabolomics in populational heal	th research	
	Chair: Robert Hall, Biosciences, Wageningen UR, NL		
14:15-14:45	Eline Slagboom, Leiden University Medical Center, NL	Metabolomics biomarkers in human ageing research monitoring risk and response to interventions	
14:45-15:05	Emile Callemeyn, LIMET, Ghent University, BE	Determining the drivers of pediatric overweight and obesity: how does the salivary metabolome reflect children's anthropometrics and dietary intake?	
15:05-15:25	Dieter Deprez, Cosmogroup, BE	Hack your inner selfie with advanced multiomics analytics	
15:25-15:45	Tugce Cobanoglu, VU Amsterdam, NL	How to Enhance Your LC-MS-Based Metabolomics Data Analysis: Advanced Strategies to handle Comprehensive Studies	
15:45-16:20	Coffee break		
16:20-18:00	Session 4: Lipidomics		
	Chair: Michel van Weeghel, Amsterdam UMC, NL		
16:20-16:50	Michael Witting, Helmholtz Zentrum München, DE	Mining the Caenorhabditis elegans lipidome using HRMS, ion mobility, and enhanced data analysis strategies	
16:50-17:10	Lidiia Rumiantseva, KU Leuven, BE	Tandem mass spectrometry-based approach to resolve isotopomers of glutamic acid	
17:10-17:30	Lisa Reid, Waters Corporation, UK	Single cell metabolomics, New instrumentation, Lipidomics, Metabolomics in Food & Nutrition research, Metabolomics in microbial applications, Biomedical applications (cancer, cardiovascular), Plant Metabolomics	
17:30-18:00	Julijana Ivanisevic, Université de Lausanne, CH	Unleashing the Potential of Lipidomics for Population Health Research	
18:00-21:00	Drinks & dinner + poster session 2		



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DAY 2: Frida	ay, September 6	
08:15 - 09:00	Arrivals day 2 + registration	
09:00-10:30	Session 5: Metabolomics in Biomedical Applications	
	Chair: Sofia Moco, VU Amsterdam, NL	
9:00- 9:30	Celia Berkers, Utrecht University, NL	Unravelling metabolic communication in cancer
9:30- 9:50	Victoria Pozo Garcia, VU Amsterdam, NL	In-depth xenobiotic metabolism characterization of human liver cell systems
9:50-10:10	Lonneke Nouwen, Utrecht University, NL	Modulation of nucleotide metabolism by CVB3
10:10-10:30	Laurens Van Mulders, Ghent University, BE	Metabolomics Reveals Alterations in Gut-derived Uremic Toxins and Tryptophan Metabolism in Feline
		Chronic Kidney Disease
10:30 -11:00	Coffee break	
11:00 -12:50	0 Session 6: Plant Metabolomics	
	Chair: Ric de Vos, Biosciences, Wageningen UR, NL	
11:00-11:30	Wout Boerjan, VIB, Ghent University, BE	Metabolomics as a tool to discover biosynthetic pathways and identify gene functions
11:30-11:50	Emma Bonné, Ghent University, BE	Untangling metabolite structures and biosynthetic pathways in Populus nigra
11:50-12:20	Robert Hall, Biosciences, Wageningen UR, NL	How feasible might it be to implement on-line metabolomics into High Throughput Plant
11:50-12:20		Phenotyping pipelines?
12:20-13:30	Lunch + poster session 3	
13:30-15:30 Session 7: Computational Metabolomics & metabolite identification		etabolite identification
	Chair: Justin van der Hooft, Wageningen UR, NL	
13:30-14:00	Wout Bittremieux, University of Antwerp, BE	Learning From Repository-Scale Untargeted Metabolomics Data
14:00-14:20	Juan Sebastian Piedrahita Giraldo, University of Antwerp, BE	Deep Learning for Small Molecule Analog Discovery From Untargeted Mass Spectrometry
14:20-14:40	Rosina Torres Ortega, Wageningen UR, NL	Natural Product Mining by Substructure Discovery in Untargeted Computational Tandem Mass
		Spectrometry Profiles
14:40-15:00	Alejandro Mendoza Cantu, University of Antwerp, BE	User-friendly foodomics analysis using reference data-driven metabolomics
15:00-15:30	Rob Vreeken, TNO, NL	t.b.a.
15:30-15:45	Closure, BEST POSTER 2024, BMD-2025 announcement	By the NMC board