METABOLOMICS2025
PRAGUE, CZECH REPUBLIC JUNE 22-26
21st Annual Conference of the Metabolomics Society

Career Night Roundtable
Discussion Leaders

Translating Research into Industry Applications

Tomáš Pluskal
Czech Academy of Sciences, Prague

Tomáš Pluskal leads the Biochemistry of Plant Specialized Metabolites research group at the Institute of Organic Chemistry and Biochemistry of the Czech Academy of Sciences (IOCB Prague). His research integrates metabolomics, mass spectrometry, and machine learning to explore plant-derived natural products and develop sustainable biosynthetic tools. Originally trained in computer science, Dr. Pluskal transitioned to molecular biology during a decade-long stay in Japan, where he earned a PhD in molecular biotechnology. He later conducted postdoctoral research at the Whitehead Institute of MIT, focusing on the biosynthesis of bioactive compounds in plants.

Clary Clish
Broad Institute of MIT and Harvard, USA

Clary Clish is Senior Director of the Metabolomics Platform and an Institute Scientist at the Broad Institute of MIT and Harvard. His lab works to develop and apply technologies for the systematic analysis of metabolites and small molecules within biological specimens. His research is highly collaborative and broadly aims to advance our understanding of the role of metabolism in normal physiology and disease. Current projects range in scope from dissecting metabolic dependencies in cancer to identification of early derangements of metabolism that precede disease, or clinical symptoms of disease, in human cohorts.

Prior to joining the Broad Institute, Clish held senior and executive management positions in the biotechnology industry from 2001-2008, including Vice President of Discovery at Gene Logic Inc. and Director of Metabolite Biochemistry at Beyond Genomics Inc. From 1997-2001, Clish was a postdoctoral fellow and instructor in the laboratory of Dr. Charles Serhan at the Center for Experimental Therapeutics and Reperfusion Injury at Brigham & Women's Hospital and Harvard Medical School. In the Serhan laboratory, his work focused on characterizing lipid mediators in acute inflammation and its resolution, including his discovery of a novel class of anti-inflammatory lipid mediators that have since been named "resolvins." Clish received his B.Sc. from McGill University in chemistry and biological sciences in 1991 and his Ph.D. environmental science and chemistry from Portland State University in 1996.

Career Transitions

Kati Hanhineva
University of Turku, Finland

Kati Hanhineva is a professor in food development with special focus on Nordic foods and health effects at the University of Turku, Department of Life Technologies, Food Sciences unit. She also holds a Research Director position at the School of Public Health and Clinical Nutrition at the University of Eastern Finland. Her main research focus is on the biochemistry of foods, especially phytochemical compounds, and the effect of food processing such as fermentation on their composition. Likewise, molecular-level understanding of the role of nutrition in maintaining good health, and food-microbiota interaction are within the core of the research. The key analytical technology at the different stages of research is the LC-MS-based metabolic profiling that her group has developed and utilized for various food and nutrition-related applications. Prof Hanhineva is also one of the co-founders of the company Afekta Technologies providing metabolomics analytical services.

Liz Want
Imperial College London, United Kingdom

I am a Reader in Clinical Mass Spectrometry in the Department of Metabolism, Digestion and Reproduction at Imperial College London. I joined Imperial in 2006 after working as a postdoctoral metabolomics researcher at the Scripps Research Institute, La Jolla, CA. Prior to that, I obtained my PhD in Clinical Biochemistry from King's College London. At Imperial College, I became Lecturer in 2007, Senior Lecturer in 2014 and Head of the Bioanalytical Chemistry Section in 2022. I am Director of the Imperial International Phenome Training Centre, which runs several popular hands-on Metabolomics courses every year.

I have >25 yrs of experience in mass spectrometry and chromatographic techniques and have spent the past 20 years working in the field of mass spectrometry-based metabolomics. My research focuses on the development, optimisation and application of novel liquid chromatography – mass spectrometry (LC-MS) based methodologies for metabolomics. I aim to improve molecular assays for clinical studies, leading to deeper understanding of diseases, improved healthcare and better patient outcomes. I have applied these assays to the analysis of various biological samples, in biomedical areas including cardiovascular disease, glioblastoma, burn injury and pregnancy.

I also have a strong interest in teaching and training. I have been the Deputy Director of the MRes in Biomedical Research at Imperial College since 2018. I have mentored multiple BSc, Master's, Doctoral students and Postdoctoral students. I have also enjoyed designing and giving metabolomics courses at International Conferences (ASMS, MSACL). I am active in the International MSACL committee and am Chair of the London Metabolomics Network.

Careers in Industry

Biswapriya Misra
Enveda, India

Dr. Biswa Misra is a Founding Fellow at Enveda, where he leads mass-spectrometry–based metabolomics and multi-omics programs to uncover bioactive natural products and translational biomarkers for drug discovery. From 2017 to 2020 he was an Assistant Professor at the Centre for Precision Medicine, Wake Forest Baptist Medical Centre, applying multi-omics to metabolic and neurodegenerative diseases including diabetes, obesity, chronic pain, Alzheimer's, autism, and Atherosclerosis. He has authored 100+ peer-reviewed papers, reviewed manuscripts for more than 120 journals, and is an active member of the Metabolomics Society and the American Society for Mass Spectrometry. Dr. Misra has served on the International Metabolomics Society's EMN Committee (2 nd batch), MANA's Early Career Research Committee and Board of Directors, mentors through WomiX, and co-organizes events such as Virtual Podium Asia-Pacific series to amplify diverse voices in omics.

Matej Orešič
Örebro University, Sweden

Prof. Matej Orešič holds a PhD in biophysics from Cornell University (NY, USA). He is a group leader in systems medicine at the University of Turku, visiting associate professor at the Örebro University, and guest professor in lipids and nutrition at the Oil Crops Research Institute of the Chinese Academy of Agricultural Sciences. Prof. Orešič is one of the initiators of the Nordic Metabolomics Society and currently its chair of the board. As of 2016, he is a Lifetime Honorary Fellow of the Metabolomics Society.

His main research areas are metabolomics applications in biomedical research and systems medicine. He is particularly interested in the identification of disease vulnerabilities associated with different metabolic phenotypes and the underlying mechanisms linking these vulnerabilities with the development of specific disorders or their co-morbidities, with main focus on type 1 diabetes and non-alcoholic fatty liver disease. Prof. Orešič also initiated the popular MZmine open source project, leading to popular software for metabolomics data processing.

International Employment Opportunities: Understanding visas, relocation, and cultural considerations

Sastia Prama Putri
University of Osaka, Japan

Dr. Sastia Prama Putri is an Associate Professor at The University of Osaka's Graduate School of Engineering, where she leads research in metabolomics for food science and microbiology, leveraging cutting-edge analytics to study tropical foods like coffee, cacao, coconut, and fermented products (e.g., tempeh). A graduate of Bandung Institute of Technology (B.Sc.) and Osaka University (M.Eng., Ph.D.), she has earned global recognition, including the L'Oréal-UNESCO Women in Science Award (2015), the Metabolomics Society President's Award (2020), and the Momofuku Ando Prize (2024) for her transformative work. Beyond academia, she bridges science and industry as: Co-founder of PT. Arumia Kharisma, exporting premium Indonesian commodities (tempeh, tropical fruits) to Japan. Founding Chair of the EMN (Early-career Member Network) Metabolomics Society as well as creator of Bright Squad, a community promoting proactive wellness. A passionate advocate for sustainable food systems, Dr. Putri's interdisciplinary approach—combining metabolomics, food science, and microbiology—drives innovation in nutrition, safety, and global food value chains.

María Eugenia Monge
CIBION – CONICET, Argentina

Dr. María Eugenia Monge is an Independent Researcher of the National Scientific and Technical Research Council of Argentina (CONICET) and works at the Centro de Investigaciones en Bionanociencias (CIBION). In 2006, she obtained her Ph.D. in analytical and physical chemistry from the University of Buenos Aires. Between 2007 and 2014, she held postdoctoral positions in Italy, France, and the USA. In 2014, she was recruited by CONICET to set up a new laboratory in a new research center in Argentina. At CIBION she leads the Bioanalytical Mass Spectrometry Group and the Mass Spectrometry Facility. Her research group develops MS-based analytical methods using metabolomics and lipidomics approaches with applications in health, food and the environment. As well, her team has contributed with pipelines for preprocessing LC-MS and direct-to-MS data for quality control procedures in untargeted metabolomics workflows. Since 2014, she has coordinated metabolomics courses for South American students, and has participated in strengthening the Latin American scientific community through teaching in Brazil, Colombia, Mexico, and Argentina. Since 2021, she is a founding member of the Latin American Metabolic Profiling Society (LAMPS), and she has contributed to engage LAMPS as an international affiliate of the Metabolomics Society. Since 2019, she has been a member of the Metabolomics Society, where she currently serves as the Secretary, chair of the membership committee, vice-chair of the LipidMet Task Group and vice-chair of the International Affiliations Task Group. Since 2019, she has been a member of the metabolomics quality assurance and quality control consortium (mQACC). In 2022, she was awarded the Metabolomics Society Medal. Since 2025, she is an Executive Editor of Metabolomics.

Leadership and Management in Research Teams

Erin Baker
University of North Carolina at Chapel Hill, USA

Erin S. Baker is an Associate Professor at the University of North Carolina at Chapel Hill. To date, she has published over 200 peer-reviewed papers utilizing different analytical chemistry techniques to study both environmental and biological systems. She is currently serving as the Vice President of Education for the International Lipidomics Society, a mentor for Females in Mass Spectrometry, and an Associate Editor for the Journal of the American Society for Mass Spectrometry. She has received seven US patents, two R&D 100 Awards, been named to the 2019, 2021, 2023, and 2024 Analytical Scientist Top 100 Power Lists, and was a recipient of the 2016 ACS Rising Star Award for Top Midcareer Women Chemists, 2022 ASMS Biemann Medal, and 2022 IMSF Curt Brunnée Award. Currently, her research group utilizes advanced separations and novel software capabilities to examine how chemical exposure affects human health.

Fabien Jourdan
INRAE-MetaboHUB, France

Fabien Jourdan is a senior research scientist at INRAE (the French National Research Institute for Agricultural and Environmental Research) Toulouse, France. He graduated with a PhD in computer science at the University of Montpellier (France) in 2004, working on the premises of social networks, in particular studying their topology. He then shared his time between a software startup company and a research assistant position. In 2005 he was hired by INRAE (Toulouse, France) to develop computational solutions for metabolomics studies (mainly NMR). In 2006 he spent a year as a visiting researcher at the University of Glasgow working with Pr. Barrett on metabolic profiling (HRMS) of Trypanosoma brucei, a parasite and causative agent of sleeping sickness.

Fabien Jourdan has pioneered bioinformatics methods to study Genome-Scale Metabolic Networks using metabolomics (and other omics data) to predict metabolic impacts associated with genetic or environmental perturbations. His research team is currently applying these approaches to food toxicology and more broadly in studying the link between metabolism and human health (e.g. cancer).

Since 2009, Fabien Jourdan has led the development of MetExplore open access web server which is used by more than 800 users worldwide and maintained and developed by a group of 10 computational biologists. Since 2021, Fabien Jourdan is director of the French National infrastructure for metabolomics and fluxomics, MetaboHub. He was president of the French-speaking Metabolomics and Fluxomics Network (RFMF) from 2015 to 2019. He was elected on the board of the Metabolomics Society in 2019 and has been secretary since 2020.

How to be a Good Reviewer (tips and tricks for peer review)

Roy Goodacre
University of Liverpool, United Kingdom

Trained as a microbiologist and analytical chemist, Roy's research develops metabolomics and spectroscopy to address interesting biological questions. He has helped establish mass spectrometry-based metabolomics for long-term studies and is employing these methods for clinical/health and plant studies, as well as for understanding microbial systems. He has developed a variety of different Raman spectroscopy approaches for bioanalysis with a particular focus on metabolite quantification and image analysis of single cells.

Roy helped establish the Metabolomics Society and is Editor-in-Chief of the journal Metabolomics.
Wiki: https://en.wikipedia.org/wiki/Roy_Goodacre
Home page: http://www.biospec.net
Google Scholar: https://goo.gl/B3yWRC
LinkedIN: https://uk.linkedin.com/in/roy-goodacre-5023166

Michael Witting
Helmholtz Zentrum Muenchen, Germany

Dr. Michael Witting studied Applied Chemistry with a functional direction into Biochemistry at the Georg-Simon-Ohm University of Applied Sciences, Nuremberg and obtained his PhD in 2013 from the Technical University of Munich. Since 2021, he has been serving as Privatdozent at the Technical University of Munich and Deputy Head of the Metabolomics and Proteomics Core at Helmholtz Zentrum München. In 2018, he was named on the Top 40 under 40 Power List of The Analytical Scientist. He is an active member of the Metabolomics Quality Assurance and Quality Control Consortium (mQACC), the International Lipidomics Society and the Metabolomics Society, where he served as a member on the Board of Directors from 2020 to 2022.

Obtaining a Postdoctoral Fellowship

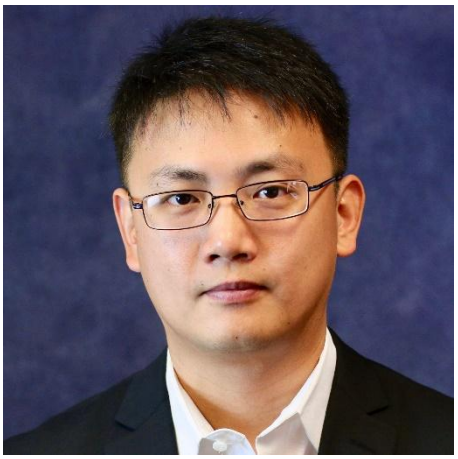
Aurelia Williams
North-West University, South Africa

Aurelia A. Williams is an Associate Professor in the Biochemistry Department at North-West University (NWU), South Africa, and a researcher in the Biomedical and Molecular Metabolism Research Group (BioMMet). Her research focuses on elucidating the interplay between metabolism, immune responses, and genetic factors in the pathogenesis of infectious and acquired diseases, particularly HIV/AIDS and its associated comorbidities. Dr. Williams earned her MSc from the University of Johannesburg and her PhD in Biochemistry from the University of Pretoria. She further expanded her expertise in molecular and metabolic research through postdoctoral training at the University of California, San Francisco.

An active leader in South Africa's scientific community, Dr. Williams is the Deputy President of Metabolomics South Africa (MSA), which she co-founded to promote metabolomics research and collaboration. She chairs MSA's Training and Conference Committee and previously served as Deputy Secretary (2018–2020). Dr. Williams is also a facilitator for the Technological Higher Education Network South Africa (THENSA) under the Department of Science and Innovation, and a member of several scientific societies.

Committed to mentorship, equity, and community impact, Dr. Williams supports the next generation of scientists through student supervision, outreach initiatives, and advocacy for women in science. She serves as a reviewer and examiner for journals, institutions, and funding bodies. Dr. Williams contributes to ethical health research through her service on Aurum's Community Advisory Board, ensuring that research reflects community values and context. Internationally recognized for her work, Dr. Williams has published widely, presented at numerous conferences, and received several accolades. Her work bridges laboratory science and real-world impact—advancing health research while fostering inclusive scientific progress across Africa and beyond.

Tao Huan
University of British Columbia, Canada



Dr. Tao Huan is an Associate Professor in the Department of Chemistry at the University of British Columbia (Vancouver, Canada), where he also holds a Canada Research Chair position in Metabolomics and Exposomics. Dr. Huan earned his Ph.D. in Analytical Chemistry from the University of Alberta in 2015 under the supervision of Dr. Liang Li and completed his postdoctoral training with Dr. Gary Siuzdak at The Scripps Research Institute in 2018. Dr. Huan's research at UBC focuses on the synergistic development of analytical chemistry and bioinformatics to enhance the performance of mass spectrometry for omics-scale analysis of small-molecule metabolites. He has authored over 100 peer-reviewed publications, which have collectively been cited more than 5,500 times, with an h-index of 37. Recognized as an emerging leader in analytical chemistry, Dr. Huan has received numerous awards, including the 2025 President's Award from the Metabolomics Society, the 2025 Fred Beamish Award from the Canadian Society for Chemistry, the 2024 Rising Star in Measurement Science Award from the American Chemical Society, and the 2022 Early Career Rising Star Award by the Metabolomics Society of North America.

Grant Writing

Jennifer Kirwan
Charité University Hospital, Germany

Dr Kirwan started her career as a clinical veterinarian where she became increasingly interested in translational and evidence based medicine before undertaking a PhD in metabolomics. She currently heads Berlin Institute of Health Metabolomics at Charité University Hospital in Berlin, where she focuses on translational health-related metabolomics, especially on its quality management aspects.

Later this year, she is about to start a new chapter as Professor of Veterinary Metabolomics at Vetmeduni in Vienna, Austria. She is particularly interested in the gut-brain-heart health triad and how the microbiome influences health. She is a founding member of the German Metabolomics Society, a former Coordinating Committee Chair of the international Metabolomics quality assurance and quality control consortium (MQACC) and is an active member of the Precision Medicine and Pharmacogenomics working group of the International Metabolomics Society.

Lynn Vanhaecke
Ghent University, Belgium

Lynn Vanhaecke holds a PhD in Bioscience Engineering (2008), is Full Professor and head of the Lab of Integrative Metabolomics at Ghent University (Belgium) since 2011, and holds a 20% appointment at the Institute of Global Food Security at Queen's University Belfast (UK) since 2018. Lynn's major research objectives include the holistic analyses of small molecules through metabolomics and lipidomics using high-resolution mass spectrometry (including ambient ionization) in relation to the diet-microbiome-health axis. In 2023, she received an ERC Consolidator Grant to continue her work on advancing metabolomics into pediatric precision medicine. She is also involved in many collaborative efforts including the first Flemish Exposome project called Flexigut, and has more than 250 publications (H-index 55). Lynn is inventor in a couple of patents and holds a licensing agreement for some of the novel metabolic and lipidomic fingerprinting and metabotyping methods she developed. She is an active board member of the Nutritional genomics society and an elected board member of the Metabolomics Society.

Science Communication

Alice Limonciel
biocrates life sciences ag, Austria

Dr. Alice Limonciel holds a PhD in molecular biology from the Medical University of Innsbruck and completed postdoctoral research in multiomics toxicology in Austria and the Netherlands. As Chief Scientific Officer at biocrates life sciences, Alice is dedicated to advancing the role of metabolomics in modern medicine—from personalized care to population health. Driven by a passion for scientific communication and community engagement, she developed The STORY principle—a practical framework for making sense of metabolomics data—detailed in her book of the same name. She also hosts The Metabolomist podcast, where she connects metabolomics scientists through their stories.

Olya Vvedenskaya
Lipotype Gmbh, Germany

Dr. Olya Vvedenskaya studied medicine specializing in medical biophysics in Moscow and worked on her MD thesis devoted to traumatic brain injury and mass spectrometry at the University of Pittsburgh, USA. She further did her PhD in Berlin, Germany working on a multi-omics approach to research of liver cancer and precancerous conditions. She continued her work in translational medicine and mass spectrometry in Dresden, working as a postdoc in MPI-CBG. Currently, she works in scientific communication at Lipotype, focusing on scientific outreach, marketing strategy, content creation, and community engagement strategies.

Additionally, to her main job, Olya devotes her time to academic mental health advocacy and community support. She co-founded Dragonfly Mental Health (2019) and Sci.STEPS mentorship program for scientists (2022).

Diversity, Equity, and Inclusion

Millena Barros Santos
INRAE Avignon, France

Millena Barros Santos is a junior research scientist in the UMR SQPOV - Safety and Quality of Products of Plant Origin at INRAE (the French National Research Institute for Agricultural and Environmental Research) in Avignon, France. Her research project involves applying metabolomics to explore the evolution of phytoconstituents during the production-storage-processing-consumption-digestion continuum, hierarchising the reactivity factors and key stages in the processing and digestion of fruits and vegetables, and predicting product nutritional quality. She holds a PhD in Food and Nutrition (Food Science Area), from the Food and Nutrition Graduate Program (PPGAN) at the Federal University of the State of Rio de Janeiro (UNIRIO) in Brazil, supported by a CAPES scholarship. During her thesis, she had the opportunity to conduct untargeted metabolomic analyses of various food matrices through collaborations with Brazilian and international laboratories and to follow an internship with a Brazilian scholarship (FAPERJ) at INRAE, Institut SupAgro, and CIRAD in Montpellier, France. She was a Postdoctoral Researcher at the Bordeaux Metabolome-MetaboHUB (INRAE Bordeaux Nouvelle-Aquitaine) in France, applying mass spectrometry-based metabolomics to study large plant cohorts and elucidate associations between the metabolome and agronomical traits through predictive metabolomics. Millena is co-chair of the Diversity, Equity, and Inclusion (DEI) Task Group of the Metabolomics Society, and she is on the Committee of the Portal Metabolômica Brasil. She has previously served on the Early-career Members Network (EMN) Committee and treasurer 2022-2024.

Domenica Berardi
Yale University, USA

Dr. Domenica Berardi is a Postdoctoral researcher at the Department of Public Health at Yale University (USA) where she is using metabolomics to simultaneously analyze the effects of exposures, their changes to the endogenous metabolome and biological impact for cancer development and progression. She holds a PhD in Pharmacy and Biomedical Science from the University of Strathclyde (Glasgow, UK) where her research focused on the investigation of Aging and the assessment of the metabolic changes associated with its physiological and degenerative processes. She joined the EMN society with the idea of transmitting the opportunities and teaching received to the younger scientists through continuous learning, active allyship, and intentional action.