

3rd International Plasmalogen Symposium 2023

September 21st to 22nd

Program

Thursday September 21st

08:00 – 08:45 **Opening of Registration and Poster Mounting**

08:45 – 09:00 **Welcome Address**

09:00 – 10:30 **1st Session: The fundamental role of plasmalogens in mammalian physiology**

Chair: Johannes Berger and Katrin Watschinger

Nancy Braverman The clinical picture caused by ether lipid deficiency

Masanori Honsho Regulation of plasmalogen biosynthesis in mammals

Irfan Lodhi Plasmalogens in the regulation of energy homeostasis

10:30 – 11:00 **Coffee Break**

11:00 – 13:00 **2nd Session: Ether lipid biochemistry and cell biology in mammals**

Chair: Irfan Lodhi and Nancy Braverman

Serhii Chorny Resolution of the role of peroxisomal beta-oxidation and ABC transporters in ether lipid synthesis

Katrin Watschinger Biochemistry of plasmanylethanolamine desaturase

Johannes Berger The role of plasmanyl and plasmenyl ether phospholipids in brain pathologies

Kristin Böhlig Visualization of intracellular ether lipid localization and transport

Hua Bai Peroxisomal-derived ether phospholipids regulate mitochondrial dynamics through the recruitment of fission proteins during aging

13:00 – 15:20 **Poster Session with Lunch Buffet**

15:20 – 16:15 **Lifetime Achievement Award in Plasmalogen Research**

Chair: Johannes Berger

Raphael A Zoeller Forward Genetics to Drug Discovery – An Unexpected Journey

16:15 **Departure by bus to dinner location**

22:30 **Return to Center for Brain Research (Conference Venue)**

09:00 – 10:30 3rd Session: The analytical perspective of ether phospholipids

Chair: Yvette Schooneveldt and Yow Keat Tham

Markus A. Keller	Elucidating Molecular Characteristics and Tissue-Specificity of Ether Lipids in Plasmalogen-Deficiency
Jakob Koch	Elucidating plasmanylin and plasmenyl assignment in liquid chromatography and ion mobility separations
Frédéric M. Vaz	Two new ether lipid classes in relation to Sjogren Larsson syndrome
Expert Opinion	Quantitative comparison of different lipid (sub)classes (e.g. ethanolamine and choline plasmalogens): Markus A. Keller, Frédéric M. Vaz, Sudip Paul

10:30 – 11:00 Coffee Break

11:00 – 12:30 4th Session: Plasmalogen modulation in human diseases

Chair: Pedro Brites and Markus Keller

Sudip Paul	Plasmalogen modulation is a potential therapy for non-alcoholic fatty liver disease
Yow Keat Tham	Plasmalogen Modulation Attenuates Pathological Cardiac Morphology and Preserves Function in a Mouse Model of Dilated Cardiomyopathy
Tara Smith	Generation and characterization of an inducible plasmalogen-deficiency animal model of neurodegeneration
Yvette Schooneveldt	Exploring Ether Lipid Metabolism and Obesity in Large Population Cohorts using Lipid Ratios and GWAS

12:30 – 14:00 Lunch

14:00 – 15:30 5th Session: Plasmalogens in bacteria and plasmalogen delivery systems

Chair: Shamim Hossain and Serhii Chorny

Howard Goldfine	Plasmalogens in bacteria: Distribution, biosynthesis and function
Montserrat Elías Aranz	Plasmalogen biosynthesis in the bacterium Myxococcus xanthus: parallels and variations with the mammalian pathway
Yuru Deng	Lipids in cubic membranes: a focus on plasmalogen
Angelina Angelova	Nanoformulation of plasmalogens for applications in nanomedicine

15:30 – 16:00 Coffee Break

16:00 – 17:30 6th Session The specific role of Plasmalogens in Brain function

Chair: Masanori Honsho and Hua Bai

Shamim Hossain	Unlocking the mysteries of plasmalogens: The vital role in boosting brainpower and fighting diseases
Jinxin Gu	Plasmalogens eliminate aging-associated synaptic defects in mice
Pedro Brites	The role of plasmalogens on the nervous system

17:30 - 17:40 Closing Remarks

18:30 Sightseeing through Vienna and “Stadtheuriger” (not included in the Registration Fee)