

### 3<sup>rd</sup> General EpiLipidNET meeting

10<sup>th</sup>-12<sup>th</sup> of July 2023  
Toulouse, France

Ecole d'ingénieurs de Purpan,  
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<b>10<sup>th</sup> of July</b>	
<b>EpiLipidNET Young Researchers and Innovators Meeting</b>	
<b>Session #1</b>	
Chair: Patricia Prabutzki	
13:00 – 13:15	<b>Welcome and Updates from the YRI committee</b>
13:15 – 13:30	<b>A single sample preparation for multi-omics analysis</b> Pauline Le Faouder, MetaboHUB-Metatoul, France
13:30 – 13:45	<b>Blood Micro-sampling: Can we push the boundaries in clinical lipidomics?</b> Julia Kuligowski, Health Research Institute La Fe, Spain.
13:45 – 14:00	<b>Plasma lipidomics of the acute adaptive response to aerobic exercise</b> Dominika Olesova, Institute of Experimental Endocrinology, Slovakia
14:00 – 14:15	<b>Advancing eipilipid identification with LPPtiger 2: enhanced workflow with extended lipid coverage</b> Zhixu Ni, TU Dresden, Germany
14:15 – 15:15	<b>Invited speaker:</b> <b>Imposter phenomenon: definitions and remedies in a research environment</b> Olya Vvedenskaya, Dragonfly mental health & Lipotype, Germany
15:15 – 15:45	Coffee break
<b>Session #2</b>	
Chair: Aleš Kvasnička	
15:45 – 16:00	<b>Inflammation regulation across the COVID-19 pandemic</b> Denise Biagini, University of Pisa, Italy
16:00 – 16:15	<b>Study of isoprostanoids in omega-3 based dietary supplements</b> Rana Awad, Institut des Biomolécules Max Mousseron, France

16:15 – 16:30	<b>Metabolic symbiosis between adipocytes and tumor cells: a major role in the aggressiveness of specific metabolic subtypes of triple-negative breast cancers?</b> <b>Marie Rebeaud</b> , Université de Toulouse, France
16:30 – 16:45	<b>Quantification of bacterial lipids produced by the gut microbiota: role in visceral pain</b> <b>Anaëlle Durbec</b> , Institut des Maladies Métaboliques et Cardiovasculaires, France
16:45 – 17:00	<b>A metabolic crosstalk occurs between human bone marrow adipocytes and prostate cancer cells</b> <b>Marine Hernandez</b> , Université de Toulouse, France
17:00 – 17:30	<b>Poster polonaise</b> data blitz series of 60 seconds talks. Every participant has the opportunity to show one slide to focus attention on the topic of their posters
17:30 – 18:00	<b>Keeping in touch: How to sustain EpiLipidNET YRI network and introduction to Discord</b>
Evening	<b>YRI Dinner</b> <b>Separate registration is mandatory!</b>

<b>11<sup>th</sup> of July</b>	
9:00 – 10:30	<b>EpiLipidNET Management Committee meeting</b> (only for MC members)
10:30 – 10:50	Coffee break
10:50 – 11:00	<b>Opening and Welcome</b> <b>Justine Bertrand-Michel</b> , MetaToul, Toulouse, France
11:00 – 11:30	<b>Keynote lecture</b> “EpiLipidNET beyond 2024 – possible direction towards network sustainability” <b>Maria Fedorova &amp; Co</b>
11:30 – 12:00	<b>Keynote lecture</b> Adipose lipid and lipolysis, more than storage: cellular and inter-organ player <b>Pierre Damien Dénéchaud</b> , INSERM, University of Toulouse, France
12:00 – 13:00	Lunch
<b>Lipidomics in disease</b> Chair: Corinne M. Spickett	
13:00 – 13:30	<b>Chasing anticancer lipids in action</b> <b>Zsolt Balogi</b> , University of Pécs, Hungary

13:30 – 14:00	<b>Application of lipidomics approaches to identify exploitable vulnerabilities in cancer</b> Johan Swinnen, KU Leuven, Belgium
14:00 – 14:20	<b>Immunodominant protein P116 from <i>M. pneumoniae</i> scavenges cholesterol and essential lipids</b> Noemi Rotllan Vila, IIB Sant Pau and CIBERDEM, Spain
14:20 – 14:40	<b>Serum sphingolipidomic analyses reveal an upregulation of long-chain ceramides in experimental non-alcoholic fatty liver disease and associated cardiomyopathy</b> Josep Julve, IIB Sant Pau, Barcelona and ,CIBERDEM, ISCIII, Madrid
14:40 – 15:00	<b>Cholesterol biogenesis presents a PI3K/PTEN-dependent actionable metabolic node for the treatment of anti-hormone therapy-refractory breast and prostate cancers</b> Onur Çizmecioğlu, Bilkent University, Turkey
15:00 – 15:30	Coffee break
<b>(Missed)Opportunities – from the bench to the market. Focus on patenting</b> Chair: Daniel Torocsik	
15:30 – 15:40	<b>“Industry meets Academia”: activities and future plans</b> Daniel Torocsik, University of Debrecen, Hungary
15:40 – 16:00	<b>How to promote technologies resulting from academic research</b> Rudy Baron, Pierre-Jean Dubois, Toulouse Technology Transfer, France
16:00 – 16:20	<b>From the discovery of new bacterial lipids to therapy in visceral pain</b> Nicolas Cenac, INSERM, France
16:20 – 16:40	<b>Vitamin A5 from identification towards marketing</b> Ralph Rühl, Debrecen, Hungary
16:40 – 17:00	<b>Round table discussion – do and don'ts in technology transfer</b>
<b>(epi)Lipidomics software demo session    Poster session</b> Chair: Laura Goracci	
17:00 – 19:00	<ul style="list-style-type: none"> <li>• <b>LIFS tools: LipidCreator &amp; Skyline, LipidXplorer, LUX Score and Goslin</b> Nils Hoffmann, Universität Bielefeld, Germany</li> <li>• <b>WikiPathways, PathVisio, BridgeDb, and Wikidata for lipids</b> Egon Willighagen, Maastricht University, The Netherlands</li> <li>• <b>LIPIDMAPS databases and tools</b> Matthew Conroy, Cardiff University, United Kingdom</li> </ul>

	<ul style="list-style-type: none"> <li>• <b>LipostarMSI e Pyxis</b> <b>Sara Tortorella</b>, Molecular Horizon srl</li> <li>• <b>LPPtiger 2</b> <b>Zhixu Ni</b>, TU Dresden, Germany</li> <li>• <b>Lipostar 2</b> <b>Laura Goracci</b>, University of Perugia, Italy and <b>Paolo Tiberi</b>, Molecular Discovery Ltd</li> </ul>
20:00	<b>Conference Dinner</b> <b>(Brasserie les Arcades, place du Capitol)</b>

<b>12<sup>th</sup> of July</b>	
<b>Strategies for non-targeted lipidomics and lipidomes discovery</b> Chair: Julia Kuligowski	
9:00 – 9:30	<b>Revealing local lipid C=C isomerism with mass spectrometry imaging</b> <b>Sven Heiles</b> , Leibniz-Institut für Analytische Wissenschaften (ISAS) and University of Duisburg-Essen, Germany
9:30 – 10:00	<b>Probing natural lipid variations in anti-microbial resistant bacteria</b> <b>Xueli Guan</b> , Nanyang Technological University, Singapore
10:00 – 10:20	<b>Discovery of novel lipid biomarkers for early diagnosis of breast cancer in formalin-fixed paraffin embedded tissue and plasma samples</b> <b>Finnur Freyr Eiríksson</b> , University of Iceland and ArcticMass, Iceland
10:20 – 10:40	<b>Deep lipidomic profiling reveals sex dimorphism of lipid metabolism in calcific aortic valve disease</b> <b>Patricia Prabutzki</b> , Leipzig University, Germany
10:40 – 11:00	<b>Healthy dietary intake reverts the effects of age on brain lipidomic mapping and working memory performance: a gender study</b> <b>María Isabel Medina Méndez</b> , CSIC Vigo, Spain
11:00 – 11:30	Coffee break
11:30 – 12:30	<b>Golden sponsors presentations</b>
12:30 – 13:30	Lunch
<b>Metabolic Networks</b> Chair: Joanna Godzien	

13:30 – 14:00	<b>Making sense of lipidomics analyses using metabolic networks</b> Nathalie Poupin, INRAE, France
14:00 – 14:30	<b>WikiPathways 2023: more community curation, more FAIR</b> Egon L. Willighagen, Maastricht University, The Netherlands
14:30 – 14:50	<b>Dereplication of non-enzymatic oxylipins by chemical networking</b> Jean Marie Galano, University of Montpellier, France
14:50 – 15:10	<b>Network analysis reveals systematic alterations in lipidome profiles in early-onset hyperuricemia</b> Aleš Kvasnička, University Hospital Olomouc and Palacký University Olomouc, Czech Republic
15:10 – 15:30	Coffee break
<b>Skin lipidome</b> Chair: Rosario M Domingues	
15:30 – 16:00	<b>Acylceramides, skin permeability barrier function and ichthyoses</b> Nathalie Jonca, Inserm, Infinity, France
16:00 – 16:30	<b>New method by supercritical fluid chromatography with high Resolution Mass (Q-ToF) to characterize a complete profile of 230 Skin Ceramides on various samples</b> Clement Cyrielle, MetaToul, France
16:30 – 16:50	<b>New method for claim substantiation for cosmetics using lipidomics analysis</b> Paolo Bonini, oloBion SL, Spain
16:50 – 17:10	<b>Lipidome investigation of carnosine's effect on nude mice skin to prevent UV-A damage</b> Beatrice Zoanni, University of Milan, Italy
17:10 – 17:30	<b>Seizing physiological differences in the skin surface lipidome</b> Emanuela Camera, San Gallicano Dermatological Institute – IRCCS, Italy
17:30 – 18:30	<b>Presentation of EpiLipiNET educational suite for FAT (Fat Awareness Training)    Poster session</b>
18:30	<b>Closing and poster prize announcements</b>