



















# 6th EML 2017 (Toulouse, France): LIPIDOMIC ANALYSIS

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### Monday 10th of April

8h30: Welcome 9h15: Introduction

## **Innovative Lipidomics Technologies**

9h30: Untargeted lipidomic approaches and data processing: a state of the art, **Benoit COLSCH** (Paris, France)

10h : Lipid Data Analyzer 2 - a universal flexible tool for automated LC-MS/MS lipid profiling, Juergen HARTLER (Graz, Austria)

10h15: Selective triacylglycerol suppression in complex (phospho)lipid mixtures by CsCl addition, Yulia POPKOVA (Leipzig, Germany)

10h30 : Coffee break

11h: Two-dimensional mass spectrometry for lipidomics: identification of lipids from human blood plasma and brat brain, **Fabrice BRAY** (Lille, France)

11h15: Comprehensive Steroid Analysis by GCxGC-TOFMS, Andrea BILECK (Bern, Switzerland)

11h30: A new method for the dual extraction of both mRNAs and lipids from a single biological sample, Justine BERTRAND-MICHEL (Toulouse, France)

11h45: Gold Thermo Fisher Scientific Integrated software for lipid data analysis in direct infusion ultra-high resolution accurate mass spectrometry based lipidomics workflows, David Peake, Thermo Fisher Scientific.

12h15: Lunch (Buffet) + Poster session



### **Innovative Lipidomics Technologies and plant**

14h00: Localization of lipid metabolites in situ by mass spectrometry imaging reveals a recurring theme of tissue heterogeneity for seed lipid metabolism, **Kent Chapman** (Denton, USA)

14h30 : Supercritical CO2 for plant lipidomics, **David TOUBOUL** (Gif sur Yvette, France)

14h45: LC-MS-based quantification of isoprenoids unravels a key role of phytylphosphate kinase (VTE6) in plant isoprenoid synthesis, **Catharina GUTBROD** (Bonn, Germany)

15h : *Gold Waters* Mass Spectrometry Applications in Lipidomics from Flux Analysis to Profiling in Plasma and Tissue, *Jose Castro-Perez*, Waters

15h30: Coffee Break

16h00: Green light for lipid fingerprinting, **Ivo Feussner** (Gottingen, Germany)

16h30: Determination of glycerolipid and fatty acid profiles in microalgae and higher plants: comparison of methods and effect of nitrogen starvation, **Juliette JOUHET** (Grenoble, France)

16h45: Lipophenols in extra virgin olive oil is a prospective antioxidant against rat liver damage, **Jetty CHUNG-YUNG LEE** (Hong Kong)

17h : Standardization of Lipidomic data ? *Round Table* (**Gerhard LIEBISH and Kim EKROOS** )

17h45 : End

19h: Welcome party (Crowne plaza, 7 rue du Capitol)



### Tuesday 11th of April

#### Lipids in Health/ in Mammals

9h00: Signalling via class IA PI3Ks, Len Stephens (Cambridge, UK)

9h30: The amazing functional plasticity of platelets investigated by combining proteomics with lipidomics, **Christopher GERNER** (Vienna, Austria)

9h45: Sphingo-Lipidomics in patients with Hereditary Sensory Neuropathy Type 1, **Regula STEINER** (Zurich, Swizerland)

10h15: PNPLA1 defects in patients with Autosomal Recessive Congenital Ichthyosis and KO mice sustain PNPLA1 irreplaceable function in epidermal omega-O-acylceramide synthesis and skin permeability barrier, **Mélanie PICHERY** (Toulouse, France)

10h30: Coffee Break

11h00: Lipidomics as a research and diagnostic tool in inborn errors of metabolism, **Frederic VAZ** (Amsterdam, Nederland)

11h30: Characterization of 1-O-acylceramides in vernix caseosa, **Eva HARAZIM** (Prague, Czech Republic)

11h15: Applications of a high resolution lipidomics platform on cancer metabolism, **Harald KOEFELER** (Graz, Austria)

11h30: **GOLD Sciex** 

12h: Lunch (Buffet) + Poster session



### Lipids in Health/ in Mammals

14h00: Changes in the fatty acid and oxylipin pattern in response to omega-3 PUFA supplementation, **Nils SCHEBB** (Wuppertal, Germany)

14h30: Comparison of two LC-MS based screening methods for acyl-carnitines in fatty acid oxidation and abnormalities in LCHAD deficiency, **Gunter FAULER** (Graz, Austria)

14h45 : GC and NMR based lipidomic analyses support the relationship between biochemical compositions and biological functions in the highly specified adipose tissues of cetaceans, **Frédéric DOMERGUE** (Bordeaux, France)

15h15 : **GOLD AVANTI** 

15h45: Poster Session + Coffee Break

#### Lipids in Health/in Bacteria

16h15: Global lipidomic of Mycobacterium tuberculosis to identify new immunomodulatory lipids, **Emilie Layre** (Toulouse, France)

16h45: Extraction and separation of lipids from deuterated cell cultures for use in neutron scattering experiments, **Rachel MORRISON** (Grenoble, France).

17h: Identification of an analgesic amino-lipid produced by the probiotic Escherichia coli strain Nissle 1917, **Nicolas CENAC** (Toulouse, France)

17h15-19h15 : Go beyond with proven lipidomics solutions ,Welcome to LipidSearch™ *Software Workshop* (Thermo Fisher Scientific)

18h: Toulouse Tour

20h : Gala dinner restaurant "La cendrée" (11 rue des Tourneurs)

#### Wednesday 12th of April

#### **Bioactive Lipids**

9h00: Using mass spectrometry to understand immunology, **Martin GIERA** (Leiden, Nederland)

9h30: Tissue lipidomics of bioactive lipids requires tissue fixation with focused microwave irradiation, **Mikkhail GOLOVKO** (Grand Forks, USA)

9h45 : Fluxolipidomics of PUFA metabolites in the blood compartment, **Michel LAGARDE** (Lyon, France)

10h : Oxidation-induced product generation from diacyl- and alkenyl-acyl phospholipids, **Beate FUCHS** (Leipzig, Germany)

10h15 : Coffee Break

10h45: What Organic Chemists can provide for performing "high class" of lipidomic: Few Nice Stories?, **Thierry DURAND (Montpellier, France)** 

11h15: Modulation of Kv3.1 potassium channel expression and rupture of potassium homeostasis in 158N murine oligodendrocytes and BV-2 murine microglial cells treated with 7-ketocholesterol, 24S-hydroxycholesterol and tetracosanoic acid (C24:0), **Meriem BEZINE** (Dijon, France)

11h30: Combined Proteome and Eicosanoid Profiling Approach for Revealing Implications of Human Fibroblasts in Chronic Inflammation, **Laura NIEDERSTAETTER** (Vienna, Austria)

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11h45: Conclusion, Departure.















