

Scientific program

Topics :

The scientific program will be mostly dedicated to lipid and fatty acid biodiversity in living world and their role in cells. Under the title "***Biodiversity of lipid species – Benefit for nutrition and Effects on health***", we would like to gather researches from various areas with common interest for the exploration/exploitation of this diversity, the physical chemistry of unusual lipids and fatty acids, the metabolism leading to these different structures, their impact on the diseases, their effect on health and their various applications in biotechnology, pharmacology and nutrition.

Sunday, September 29th, 2019

19H15 - OPENING COCKTAIL AT HOTEL T'AIM

Monday, September 30th, 2019 - Morning session

1 - Unusual fatty acids and lipid species with interesting physiological effects

Keywords: *Unusual fatty acids, lipid species, fatty acids isomers, bioactive lipids, specific biological activities, physiological mechanism on human health (plants, microorganisms, yeast, algae, ...)*

Yvan Larondelle : Professeur, Université Catholique de Louvain, Belgique. *Conjugated fatty acids: new natural ways to develop health-promoting foods.*

Edgar Cahoon : Professeur, University of Nebraska-Lincoln, USA. *Probing Fatty Acid Natural Diversity for Enhancement of Plant Oils.*

+ **5 Oral talks** to select in the proposals

Lunch

Poster Session

Monday, September 30th, 2019 - Afternoon session

2 - Lipids and inflammatory mechanisms – Diseases and prevention

Keywords: *Role of usual and unusual FA in inflammatory mechanisms, Effect of fatty acids on health, on chronic dietary deficiency, prevention strategies, how to change the chronic dietary deficiency?*

Jesmond Dalli : Professeur, William Harvey Research Institute, London, UK. *Immunoresolvants in the maintenance of homeostasis and the control of exuberant inflammation.*

Martin Giera : Professeur, Leiden University Medical Center (LUMC), Netherland. *Boosting endogenous lipid mediator biosynthesis.*

+ **6 Oral talks** to select in the proposals

Short talks for poster presentations

General Assembly: GERLI & SFEL

Tuesday, October 1st 2019 - Morning session

3 – Lipids and vectorization

Keywords: *Creation of specific and innovative fatty acids and lipids with adapted properties (biotechnology, metabolite engineering, ...), Synthetic fatty acids (versus natural FA, ...), Structured lipids : conjugated fatty acid, very long chain and polyunsaturated fatty acids, cyclic fatty acids.*

Ben Boyd : Professeur, Monash University, Melbourne, Australia. *The critical role of lipid digestion and structuring on drug delivery using milk and milk-like systems.*

Sébastien Lecommandoux : Professeur, Laboratoire de Chimie des polymères, Université de Bordeaux, France. *Lipid and Polymer based Vesicles: from Biomimetic Membranes towards smart Drug Delivery Systems.*

+ **6 Oral talks** to select in the proposals

Lunch

Poster Session

Tuesday, October 1st 2019 - Afternoon session

4 –Lipids and nutrition / Lipids and nutraceutic – food and feed

Keywords: *Food resources (natural or processed); Epidemiology and nutritional guidelines: The expectations of the society, of the industrials, Epidemiology and nutritional guidelines: what's new? Results of the Prospective Urban Rural Epidemiology (PURE) study: fats versus carbohydrate Results of the European Prospective Investigation into Cancer (EPIC) study; Peter Zock (Amsterdam). Involvement of agro-food chains, ...*

Philip Calder : Professeur, University of Southampton, UK. *Omega-3 and inflammation - from membrane to nucleus and from bench to bedside.*

Rob Winwood : Manager Nutrition Science and Advocacy EMEA for DSM Nutritional Products and Vice Chair Council Responsible Nutrition(CRN), UK. Title: *LCPs in infant formula : the critical importance of the ARA:DHA balance.*

+ **6 Oral talks** to select in the proposals

Talks for Thesis prizes: GERLI & SFEL

Visit and gala Dinner

Wednesday, October 2nd 2019 - Morning session

4 –Lipids and nutrition / Lipids and nutraceutic – food and feed

Sophie Layé : Professeur, Laboratoire de nutrition et neurobiologie intégrée, INRA, Bordeaux, France. *Relevance of nutritional omega-3 fatty acids for depression and anxiety.*

5 – Hot topics

Alexandrine During : Assitant Professor, Laboratoire de Physiopathologie des maladies osseuses inflammatoires, Université de Lille, France. *Osteoporosis : a role for lipids.*

+ **4 Oral talks** to select in the proposals

Lunch

Poster Session

Wednesday, October 2nd 2019 - Afternoon session

6 – Contributions of lipidomic, metabolomic and fluxomic to the knowledge in lipid production and nutrition

Keywords: *Omics technologies in the acquisition of new knowledge of the biological systems (synthesis, production, degradation, regulation, ...; different organisms, comparative studies, ...), knowledge of biological systems, isotopic labelling, metabolite profiling, integration of isotopic markers, modeling, ...*

Jean-Charles Portais : Professeur, Plateforme MetaToul-MetaboHUB & STROMLab, Toulouse, France. *Comprehensive investigations of cancer cell metabolism.*

Markus Wenk : Professeur, Department of Biochemistry, National University of Singapore (NUS), Singapore. *Translation of lipidomic technologies towards quantification of blood lipids.*

+ **7 oral talks** to select in the proposals

Bus for CDG Airport : 17h30