The French Society for the Study of Lipids (SFEL) and SCI are pleased to invite you to participate in the Journées Chevreul Lipids & Brain III 2015 conference which will be held in Paris on 16-18 March, 2015, at FIAP Jean Monet.

Since 2007, the SFEL organizes this research conference every 4 years which, over a period of 3 days, examines the latest findings in this field of research within a framework of human health and nutrition.

This Lipids & Brain III 2015 conference follows on from the success of the previous conferences of 2007 and 2011 held in Paris, which have hosted more than 200 participants from more than twenty countries.

At those conferences, two outstanding scientists were honored with the French CHEVREUL Medal for their pioneering research- Dr Stanley I. RAPOPORT (Bethesda, USA) and Pr. Nicolas G. BAZAN (New Orleans, USA).

The Lipids & Brain III 2015 Conference will bring together leading researchers to present the latest findings into both fundamental and applied research on the metabolism and the biological effects of polyunsaturated fatty acids (PUFAs) within the brain and the retina, but also others specific fatty acids and structured lipids.

Recent advances on the metabolism and bioactivity of long-chain PUFAs in the central nervous system, particularly that of docosahexaenoic acid (DHA), will be examined during development and ageing. The action of PUFAs on infant development, as well as that of long-chain monounsaturated fatty acids and lipid micronutrients, will also be addressed.

Three specific sessions will be devoted to the latest insights into brain (ischemia and Alzheimer’s Disease), neuropsychiatric disorders and eye diseases.

The conference will end with recommendations for brain and eye nutrition and a session on emerging areas of research. The conference format is once again explicitly designed to promote discussion and interaction between participants and speakers.

The next Journées Chevreul 2015 Lipids & Brain III Conference will provide an opportunity to extend our knowledge in these fields of research and on the relationship between nutrition, fatty acids, lipids and central nervous system function during development and ageing. Professor Michael Angus CRAWFORD from Imperial College (London, UK) will be honoured for his research on DHA metabolism, neurosignaling and human brain evolution. Professor CRAWFORD is one of the pioneer researchers who was actively involved in the discovery of the essentiality of omega 3 fatty acids, and the presence and the functions of DHA in brain membranes.

We look forward to welcoming you to this exciting conference in Paris next spring.
Monday
March 16
2015

9h00 Registration, Posters and coffee
9h45 Introduction by the SFEL President

MEtabolism AND mechaNISms of actiOn of poLyunsatuRed fatty acids IN the Brain
(Chair: P. Guesnet, R. Bazinet)

10h00 Metabolic fate of AceDoPC, a stable form of LysoPC-DHA to target the brain
Michel LAGARDE, France

10h20 Molecular principles for docosahexaenoic acid retention and for its cell survival bioactivity in the nervous system
Nicolas G. BAZAN, USA

10h50 β-oxidation and rapid metabolism, but not uptake regulate brain eicosapentaenoic acid levels
Richard P. BAZINET, Canada

11h20 Gene expression of arachidonic and docosahexaenoic acid cascade enzymes is coordinated within transcripational modules in a hierarchical manner during human brain development and aging
Stanley E. RAPOPORT, USA

11h40 Nutritional n-3 PUFAs deficiency during perinatal period alters brain immune system and neuronal plasticity
Sophie LAYE, France

12h15 Resolvins promote resolution of brain inflammation via microglial cell polarization
Corinne JOFFRE, France

12h00 Lunch / Posters Session

14h00 Presentation by P. Guesnet
CHEVREUL Medal: Pr Michael A. CRAWFORD, UK
Past, present and future: the extreme conservation of neurosignaling and the cost of mental ill-health

15h00 Coffee break, Posters Session

LiPIDS and InFant DeVeLoPMenT
(Chairs B. Gibson, C. Bourlieu)

15h30 Differential effects of prenatal DHA supplementation by maternal socio-demographic characteristics
Maria MAKRIDES, Australia

16h00 Long-chain saturated and monounsaturated fatty acids are correlated to early development in premature infants
Birgitta STRANDVIK, Sweden

16h30 Early nutritional determinants of cognitive development in children of the EDEN mother-child cohort - Role of polyunsaturated fatty acid
Barbara HEUDE, Jonathan BERNARD, France

16h50 Parenteral nutrition and brain development after preterm birth
Randal K. BUDDINGTON, USA

17h10 Why lutein is important for the eye and the brain
Maria RAMIREZ, Spain

17h30 Posters Session
**DIETARY LIPIDS, AGEING AND BRAIN PATHOLOGIES**  
*Chairs: L. Belayev B. Delplanque*

**9h00**  
Lipid signaling: connecting inflammation and lipid metabolism  
*Mojgan MASOODI, Switzerland*

**BRAIN ISCHEMIA**

**9h30**  
Palmitic and stearic acid methyl esters as potential vasodilators and neurotransmitters  
*Hung W. (Kevin) LIN, USA*

**10h00**  
A novel therapeutic strategy for experimental stroke using docosahexaenoic acid complexed to human albumin.  
*Ludmila BELAYEV, USA*

**10h30**  
Coffee break / Posters Session

**11h00**  
A parenteral lipid emulsion protects from mitochondrial dysfunction in a MCAO mouse model of ischemic stroke  
*Gunter P. ECKERT, Germany*

**11h30**  
Role of HDL in brain ischemia/stroke  
*Olivier MEILHAC, France*

**12h00**  
Dairy fatty acids intake is protective against the occurrence of vasospasm after subarachnoid haemorrhage, while omega6 fatty acids exert an opposite role  
*Jean-Charles MARTIN, France*

**12h30**  
Lunch / Posters Session

**ALZHEIMER DISEASE**  
*P. Barberger-Gateau, S. Cunnane*

**14h00**  
Deteriorating brain uptake of glucose but not ketones in Alzheimer’s disease: Could medium chain triglycerides be of therapeutic benefit?  
*Stephen C. CUNNANE, Canada*

**14h30**  
Long-chain n-3 PUFA and cognition in older people: interaction with Apolipoprotein E genotype  
*Pascale BARBERGER-GATEAU, France*

**14h50**  
A unique brain lipidome and metabolome biosignature in Alzheimer’s Disease?  
*Giuseppe ASTARITA, USA*

**15h10**  
The rationale and efficacy of Souvenaid, a medical food targeting synaptic dysfunction in early Alzheimer’s disease  
*John W.C. SIJLEN, the Netherlands*

**15h30**  
Coffee break / Posters Session

**PSYCHIATRIC DISORDERS AND NEUROLOGICAL PATHOLOGIES**  
*Chairs: H. Bengtsen, B. Delplanque*

**16h00**  
Modern Fats and the Modern Mind: Aggression and Depression  
*Joseph R. HIBBELN, John P. SANGIOVANI, USA*

**16h30**  
Omega-3 for child behaviour and learning: clinical trials in ADHD and the general population  
*Alexandra J. RICHARDSON, United Kingdom*

**17h00**  
Phospholipids, Arachidonic Acid, and Eicosanoids Signaling in Schizophrenia  
*Jeffrey K. YAO, USA*

**17h30**  
Posters Session, 18h00 SFEL AG, Gala diner: boarding 19h45 and cruise departure 20h30
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<tr>
<th>Time</th>
<th>Session</th>
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<tr>
<td>9h00</td>
<td>Fatty acids and the prevention of ocular pathologies: where do we stand?</td>
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<tr>
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<td>Lionel BRETILLON, France</td>
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<tr>
<td>9h30</td>
<td>A Novel Role for Very Long Chain Fatty Acids in Brain Function</td>
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<td>Blake R. HOPIAVUORI, USA</td>
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<td>9h50</td>
<td>Lipids and eye diseases: an epidemiological perspective</td>
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<td>Cécile DELCOURT, France</td>
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<td>10h10</td>
<td>Phospholipase A2, the neurotrophin pigment epithelial derived factor and lipid mediators regulate corneal nerve regeneration</td>
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<td>Haydee BAZAN, USA</td>
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<td>10h30</td>
<td>Coffee break / Posters Session</td>
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<td>11h00</td>
<td>Alterations in dietary n-3 and n-6 fatty acids for treating chronic headaches</td>
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<td>Christopher RAMSDEN, USA</td>
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<td>11h30</td>
<td>Choosing foods to balance competing n-3 and n-6 HUFA and their actions</td>
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<td>Bill LANDS, USA</td>
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<td>12h00</td>
<td>LCPUFA Requirement for brain development</td>
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<td>Robert A. GIBSON, Australia</td>
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<td>Lunch / Posters Session</td>
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<td>14h00</td>
<td>Has the key role of Arachidonic Acid in the development of neural systems in infants been forgotten? – a topical review</td>
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<td>Rob WINWOOD, United kingdom</td>
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<td>14h20</td>
<td>Impact of the gut microbiota on brain development and function</td>
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<td>Sylvie RABOT, France</td>
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<td>14h40</td>
<td>The preterm pig as a translational model to study the role of lipids in growth and development</td>
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<td>Randal K. BUDDINGTON, USA</td>
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<tr>
<td>15h00</td>
<td>Lecithin Extracted from a Marine Source in the Form of Nanoliposomes Promotes Neural Network Arborization and Formation in Primary Neuronal Cultures</td>
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<td>Elmira ARAB-TEHRANI, France</td>
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<td>15h20</td>
<td>Tracing neural development and rhythms in a benchtop perfusion platform for combined long-term microelectrode in vitro electrophysiology and time-lapse imaging</td>
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<td>Axel BLAU, Italy</td>
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<td>15h40</td>
<td>Dietary triglycerides act on mesolimbic structures to regulate the rewarding and motivational aspects of feeding</td>
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<td>Serge LUQUET, France</td>
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<td>16h00</td>
<td><strong>CONCLUSIONS</strong></td>
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<td>Linder Michel</td>
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**Online registration and informations are available on the SFEL website at**
http://www.sfel.asso.fr/fr/accueil,2.html. Contact for posters, guesnet07@gmail.com or bernadette.delplanque@u-psud.fr

**OCL Journal will have the exclusivity for publishing the congress proceedings as a special open access issue in 2015**

**OCL - Oilseeds and fats, Crops and Lipids, Example «Lipids and brain 2011» OCL Vol. 18, No. 4.**
GALA DINNER: Paris by Night

On a cruising restaurant on board of a ice boat. A wonderful approach of the greatest monuments of Paris by the Seine, with a gourmet meal elaborated by Chef Marial Enguehard, «Meilleur Ouvrier de France» with all fruits and vegetables selected from Joël Thiebault garden.

Boarding 19h45, departure 20h30 at the Cygnes Island in the middle of Pont de Bir Hakeim close to Eiffel tower 75015 (5 mn from metro Bir Hakeim station, line 6 or RER C Champ de Mars-Tour Eiffel station.

www.lecapitainefracasse.com

FIAP Jean Monnet

30, rue Cabanis - 75014 PARIS

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• Metro line 6: Exit at Denfert-Rochereau or Glaciere Station

• From Roissy Charles de Gaulle Airport:
  RER B: direction Robinson/Saint Remy-les-Chevreuses. Exit at Denfert-Rochereau Station (10 mn walking) or take the metro line 6 direction Nation (see 1.)

• From Orly Airport:
  Take Orly bus or Orly Val to Denfert-Rochereau. Exit at Denfert-Rochereau Station (10 mn walking) or take the metro line 6 direction Nation (see 1.)
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