

# 2018 AOCS Annual Meeting & Expo

May 6–9 | Minneapolis Convention Center | Minneapolis, Minnesota, USA



## Phospholipid (PHO) Interest Area Tentative Technical Program

*As of March 12, 2018*

*This presentation list is not final and is subject to change.*

*The presenter is the first author, or the author indicated with an asterisk (\*).*

### Monday Afternoon

#### **H&N 1 / PHO 1: Emerging Bioactives and Health Impacts**

*Chairs: Eileen Bailey Hall, DSM Nutritional Products, USA; and Xiaosan Wang, Jiangnan University, China*

**Health Impact of the Newly Discovered Elovonoids: Stroke, Retinal Degenerations, Neurotrauma and Alzheimer's Disease.** Nicolas G. Bazan, *LSU Health New Orleans Neuroscience Center, USA*

**Evidence for the Use of Docosahexaenoic Acid in the Treatment of Breast Cancer.** Catherine J. Field, Newell Marnie, and Lynne M. Postovit, *University of Alberta, Canada*

**A Brief Overview of Palmitoleic Acid, the Forgotten MUFA.** Gretchen Vannice, *Organic Technologies, USA*

**Arachidonic Acid has Anti-diabetic Actions.** Gundala K. Naveen Kumar, and Undurti Das\*, *BioScience Research Centre, India*

**Effects of Sesamol on Lipid Metabolism and Neurodegeneration.** Xuebo Liu and Zhigang Liu, *Northwest A&F University, China*

**A Novel Method for Evaluating Anti-inflammatory Activity of Camellia Seed Oil.** Ruijie Liu<sup>1</sup>, Niannian Lan<sup>2</sup>, Ming Chang<sup>1</sup>, Qingzhe Jin<sup>1</sup>, and Xingguo Wang<sup>1</sup>, <sup>1</sup>*Jiangnan University, China*; <sup>2</sup>*School of Food Science and Technology, Jiangnan University, China*

**Dietary Krill Oil Enhances Neurocognitive Functions and Modulates Proteomic Changes in Brain Tissues of Aging Mice.** Ling Zhi Cheong, Tingting Sun, and Xiurong Su, *Ningbo University, China*

**Role of Oxidized Phospholipids in Myocardial Reperfusion Injury.** Amir Ravandi, *University of Manitoba, Canada*

## Tuesday Morning

### **PHO 2: Chemical and Biochemical Advancement in the Phospholipid Field**

*Chairs: Moghis Ahmad, Jina Pharmaceuticals Inc., USA; and Swapnil Jadhav, Archer Daniels Midland Co., USA*

**Phospholipids Modification with Enzymes: A Re-visit.** Xuebing Xu, *Wilmar Global Research and Development Center, China*

**Phenolipids for Delivery Aystems: Synthesis and Characterization.** Sampson Anankanbil<sup>1</sup>, Bianca Perez<sup>1</sup>, Chiranjib Banerjee<sup>2</sup>, Katarzyna Widzisz<sup>2</sup>, and Zheng Guo<sup>2</sup>, <sup>1</sup>*Dept. of Engineering, Aarhus University, Denmark;* <sup>2</sup>*Aarhus University, Denmark*

**New Approaches in Non-aqueous Enzymology for Modification of Lipids and Phospholipids.** Douglas G. Hayes, *University of Tennessee, USA*

**Ability of Soy Lecithin Oleogel Emulsions to Protect Probiotics and Prevent Oxidation.** Nicole I. Gaudino, Stephanie Clark, and Nuria C. Acevedo, *Iowa State University, USA*

**Lipids as Mediators of Cardiomyocyte Cell Death During Ischemia/Reperfusion Injury.** Aleksandra Stamenkovic<sup>1</sup>, Kimberley A. O'Hara<sup>2</sup>, David C. Nelson<sup>2</sup>, Andrea L. Edel<sup>2</sup>, Grant N. Pierce<sup>2</sup>, and Amir Ravandi<sup>1</sup>, <sup>1</sup>*University of Manitoba, Canada;* <sup>2</sup>*Institute of Cardiovascular Sciences, Canada*

**Sunflower and Soy Bean Lecithin: Interfacial Rheology and Kinetics at the Oil / Water Interface plus the Influence of Counter Ions.** Arnulf Schoeppe and Prashandh Sankarappan, *Cargill Texturizing Solutions Deutschland GmbH & Co.KG, Germany*

**Development of Phospholipid-Enriched Oleogels and Oleogel Emulsions Edible Semisolid Applications.** Nicole I. Gaudino<sup>1</sup>, Saeed Mirzaee Ghazani<sup>2</sup>, Alejandro G. Marangoni<sup>2</sup>, Stephanie Clark<sup>1</sup>, and Nuria C. Acevedo<sup>1</sup>, <sup>1</sup>*Iowa State Unviersity, USA;* <sup>2</sup>*University of Guelph, Canada*

**Achieving a Docosahexaenoic Acid Content of 7% Improved the Efficacy of Chemotherapy in Mice Bearing a Triple Negative Breast Cancer Human Xenograft.** Marnie Newell, Vera Mazurak, Lynne M. Postovit, and Catherine J. Field, *University of Alberta, Canada*

## Wednesday Morning

### **PHO 3: Developments and Applications of Novel and Modified Phospholipids**

*Chairs: Ernesto Hernandez, Advanced Lipid Consultants, USA; and Xuebing Xu, Wilmar Global Research and Development Center, China*

**Preparation and Functional Evaluation of Antarctic Krill Lipid.** Yuanfa Liu<sup>1</sup>, Dewei Sun<sup>2</sup>, Peirang Cao<sup>1</sup>, and Zong Meng<sup>3</sup>, <sup>1</sup>*Jiangnan University, China;* <sup>2</sup>*School of Food Science and Technology, Jiangnan University, China;* <sup>3</sup>*School of Food Science and Technology, Jiangnan University, China*

**Composition and Structure of Phospholipid in Breast Milk: Towards Specific Interest in Infant Formula.** Wei Wei<sup>1</sup>, Mingdong Dong<sup>2</sup>, and Xingguo Wang<sup>1</sup>, <sup>1</sup>*Jiangnan University, China;* <sup>2</sup>*Interdisciplinary Nanoscience Center, Aarhus University, Denmark*

**Design of Two-layered Microcapsules of Chia Oil by Using Sunflower PC-enriched Lecithin and the LBL Technique.** Luciana M. Julio<sup>1</sup>, Claudia N. Copado<sup>1</sup>, Vanesa Y. Ixtaina<sup>1</sup>, Bernd W.K Diehl<sup>2</sup>, and Mabel Tomás\*<sup>1</sup>, <sup>1</sup>*CIDCA (CONICET-UNLP), Argentina;* <sup>2</sup>*Spectral Service AG, Germany*

**Low Molecular Weight Food Grade Emulsifiers including Soy Lecithins / Phosphatidylcholine Span a Wide Range of Interfacial Tensions and Interfacial Rheological Properties.** Arnulf Schoeppe and Padmavathi Sridharan, *Cargill Texturizing Solutions Deutschland GmbH & Co.KG, Germany*

**Extraction, Purification and Enzymatic Modification of Phospholipids from Antarctic Krill.** Shulai Liu, Jie Hu, Kaixi Xu, Bokai Yu, and Yuting Ding, *Zhejiang University of Technology, China*

**Novel Structured Phospholipids and Applications from Avocado Oil.** Sara KoohiKamali and Ernesto Hernandez, *Advanced Lipids Consultants, USA*

**Characterization of Novel Vegetable Lecithin and its Application in Emulsions.** Xuebing Xu, Fang Cong\*, and Binbin Chen, *Wilmar Global Research and Development Center, China*

#### **PHO-P: Phospholipid Poster Session**

*Posters will be available for viewing from noon on Monday, May 7 through 2:00 p.m. Wednesday, May 9, 2018.*

**Physical, Oxidative Stability and Microstructure Characteristics of Structured Lipid/Skim Milk Emulsions Prepared by using Different Emulsifiers.** Abdelmoneim H. Ali\*<sup>1</sup>, Wei Wei<sup>2</sup>, Sherif M. Abed<sup>2</sup>, Sameh Korma<sup>1</sup>, Qingzhe Jin<sup>3</sup>, and Xingguo Wang<sup>3</sup>, <sup>1</sup>*School of Food Science and Technology, Jiangnan University, PR China, China;* <sup>2</sup>*State Key Laboratory of Food Science and Technology, Synergetic Innovation Center of Food Safety and Nutrition, School of Food Science and Technology, China;* <sup>3</sup>*Jiangnan University, China*

**Effect of Modified Sunflower Lecithins on Bread Quality.** Estefania N. Guiotto<sup>1</sup>, Mabel Tomás<sup>2</sup>, and Claudia M. Haros<sup>3</sup>, <sup>1</sup>*Centro de Investigación y Desarrollo en Criotecnología de Alimentos (CIDCA), Argentina;* <sup>2</sup>*CIDCA (CONICET-UNLP), Argentina;* <sup>3</sup>*Grupo de cereales, Instituto de Agroquímica y Tecnología de Alimentos (IATA-CSIC), Spain*

**Preparation of Phosphatidylcholine by Transphosphatidylation of Phosphatidylethanolamine and Phospholipase D.** Wei-Ju Lee, *Taipei Medical University, Taiwan*

**Release of  $\omega$ -3 and  $\omega$ -6 Epoxides from Acidic Phospholipids of Lipoproteins by IIA, V and X Secretory Phospholipases A2.** Arnis Kuksis and Waldemar Pruzanski, *University of Toronto, Canada*