# **CURRICULUM VITAE**

## Ruijie Liu, Ph.D.

Professor

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### **RESEARCH of SPECIAL INTEREST:**

**Functional Structured Lipids**: Synthesis, analysis, and nutritional function evaluation of structured lipids (e.g., MLCTs, cocoa butter equivalents).

**Specialty Oilseed Resources**: Exploration and nutritional functionality assessment of novel oil sources (e.g., coconut oil, palm kernel oil, and other tropical oils).

#### **EDUCATION:**

- Visiting Scholar. 02/2015 -03/2016. Department of Nutrition, College of Agriculture and Life Sciences, Cornell University
- Ph.D. 09/2007 -03/2011. Oil and Vegetable protein Engineering, School of Food Science and Technology, Jiangnan University, Advisor: Prof. Xingguo Wang, Ph.D
- M.S. 09/2004.-06/2007, Microbiology, School of Life Science, Inner Mongolia University, Advisor: Prof. Hasi Agula.
- B.S. 09/2000 Sept.-07/2004, Biotechnology, School of Life Science, Inner Mongolia University, Advisor: Prof. Sugel.

#### **WORKING EXPERIENCES:**

06/2020-Now, Professor. School of Food Science and Technology, Jiangnan University

06/2014-2020, Associate Professor, School of Food Science and Technology, Jiangnan University

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04/2011-06/2014, Assistant Professor, School of Food Science and Technology, Jiangnan University

#### **ACHIEVEMENTS AND HONORS:**

- 1. China Commerce Federation Science and Technology Progress Award, the key technology and industrialization of high-stable functional oil products (No.1), 2024
- The first prize of Shen Nong Chinese Agricultural Science and Technology Award, key technology innovation and application of all-component processing of characteristic oil (No.3), 2023
- National Grain and Oil Outstanding Scientific and Technological workers, China Grain and Oil Society, 2020
- Science & Technology Award for Young Talents, Chinese Cereals and Oils Association, 2020
- 5. Excellent Young Scholar, 2020, "Youth Blue Project" of Jiangsu Province
- 6. "Zhishan Young Scholar", 2020, Jiangnan University

#### **PROJECT:**

- 1. National Natural Science Foundation of China, Effect of oil-water interface phospholipids on antioxidant activity of tocopherol (General Program, 32372333), 2024-2027.
- National Key Technology R&D Program in the 14th Five-year Plan of China, Research and development of crucial techniques for enhancing the efficacy of functional components in specialty oilseeds and the innovation of new products (Contract No: 2023YFD2100404), 2024-2027.
- 3. International cooperation project of Jiangsu Province, Construction of steady state delivery system of fatty acid type healthy oil and development of industrialization demonstration (Contract No: BZ2024022), 2024-2027.
- Project for the formulation/revision of National food safety Standards: "Control Specifications for Polycyclic Aromatic Hydrocarbons in Food" (SPAQ-2020-36) (SPAQ-2020-36).
- Food safety national standard revision project "Food nutrition fortification ergocalciferol (Vitamin D2)" (SPAQ-2024-25), 2024-2025.

6. National Natural Science Foundation of China, Study on antioxidative effect and mechanism of edible lipid concomitant cells (General Program, 31872895), 2019-2022.

#### **PUBLICATIONS:**

- Yiwen Guo, Zitao Nie, Minjie Cao, Tian Yang\*, Guanjun Tao, Lijun Song, Ruijie Liu\*, Ming Chang, Xingguo Wang, Exploring the characteristics, digestion behaviors, and nutraceutical potential of the underutilized Chimonanthus praecox (L.) link kernel oil: A combined in vitro and in vivo study, Food Chemistry, 2024, 455,139898.
- Yiwen Guo, Tao Zhang, Ying Xu, Emad Karrar, Minjie Cao, Xiaotian Sun, Ruijie Liu\*, Ming Chang , Xingguo Wang. Effects of medium- and long-chain structured triacylglycerol on the therapeutic efficacy of vitamin D on ulcerative colitis: a consideration for efficient lipid delivery systems, Journal of Agricultural and Food Chemistry, 2023, 9, 4101–4112.
- Lin Tang, Minjie Cao, Can Liao, Ruijie Liu\*, Ming Chang, Xingguo Wang. Migration of tocopherols from the oil phase to the oil-water interface using phospholipids improved the oxidative stability of O/W emulsions, Food Chemistry 414,2023, 135719.
- Zhangtie Wang, Jinjin Zhao, Tao Zhang, Emad Karrar, Ming Chang, Ruijie Liu\*, Xingguo Wang. Impact of interactions between whey protein isolate and different phospholipids on the properties of krill oil emulsions: A consideration for functional lipids efficient delivery[J]. Food Hydrocolloids, 2022,130(22):107692.
- Ruru Liu, Ying Xu, Ming Chang, Ruijie Liu\*, Xingguo Wang Interactions between αtocopherol and γ-oryzanol in oil-in-water emulsions, Food Chemistry 356,2021, 129648
- Ruru Liu, Ying Xu, Ming Chang, LinTang, Mengyao Lu, Ruijie Liu\*, Qingzhe Jin, Xingguo Wang, Antioxidant interaction of α-tocopherol, γ-oryzanol and phytosterol in rice bran oil, Food Chemistry, 2020.128431.
- Tao Zhang, Fangcheng Qiu, Li Chen, Ruijie Liu\*, Ming Chang, Xingguo Wang, Identification and in vitro anti-inflammatory activity of different forms of phenolic compounds in Camellia oleifera oil, Food Chemistry, 2020.128660.
- Mengyao Lu, Tao Zhang, Zhongrong Jiang, Yiwen Guo, Fangcheng Qiu, Ruru Liu,Lisha Zhang, Ming Chang, Ruijie Liu\*, Qingzhe Jin, Xingguo Wang. Physical properties and cellular antioxidant activity of vegetable oil emulsions with different chain lengths and

saturation of triglycerides. LWT - Food Science & Technology, 2020,121,108948.

- Ruijie Liu, Min Cheng, Kumar S.D. Kothapallia, Zhen Wang, Elizabeth Mendralla, Hui Gyu Parka, Robert C. Blockd, Xingguo Wang, J. Thomas Brenna. Glycerol derived process contaminants in refined coconut oil induce cholesterol synthesis in HepG2 cells, Food and Chemical Toxicology,2019,127,135-142.
- Xin Guo, Longkai Shi, Shuai Yang, Roujia Yang, Xinyue Dai, Tao Zhang, Ruijie Liu,\* Ming Chang,\* Qingzhe Jin and Xingguo Wang. Effect of sea-buckthorn pulp and flaxseed residues on quality and shelf life of bread. Food & Function, 2019,10, 4220–4230.