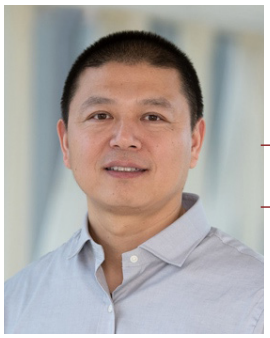
2025-2026 Seminar Series

GALLOGLY COLLEGE OF ENGINEERING
STEPHENSON SCHOOL OF BIOMEDICAL ENGINEERING
The UNIVERSITY of OKLAHOMA

GALLOGLY COLLEGE OF ENGINEERING
OKLAHOMA COBRE IN CANCER IMAGING RESEARCH
The UNIVERSITY of OKLAHOMA

BILE ACID METABOLISM IN THE PATHOGENESIS AND TREATMENT OF CHRONIC LIVER DISEASES



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Friday, February 13, 2026 | 11:00 a.m.

Gallogly Hall, Room 126

ABSTRACT

Bile acids are the end products of cholesterol catabolism. Hepatic bile acid synthesis accounts for a major fraction of daily cholesterol turnover in humans. Biliary secretion of bile acids generates bile flow and facilitates biliary secretion of lipids, endogenous metabolites, and xenobiotics. In intestine, bile acids facilitate the digestion and absorption of dietary lipids and fat-soluble vitamins. Through activation of nuclear receptors and G protein-coupled receptors and interaction with gut microbiome, bile acids critically regulate host metabolism and innate and adaptive immunity and are involved in the pathogenesis of cholestasis, metabolic dysfunction-associated steatotic liver disease, alcohol-associated liver disease, type-2 diabetes, and inflammatory bowel diseases. Bile acids and their derivatives have been developed as potential therapeutic agents for treating chronic metabolic and inflammatory liver diseases and gastrointestinal disorders. The seminar will include a basic introduction on bile acid metabolism and recent research findings on therapeutic strategies targeting bile acid signaling for treating chronic liver diseases.

BIO

Tiangang Li is Professor of Biochemistry and Physiology at OU Health Campus. He holds a Harold Hamm Endowed Chair for Adult Diabetes Research in the Harold Hamm Diabetes Center. Dr. Li is a basic scientist conducting research in chronic liver diseases, including cholestasis, fatty liver disease, and drug-induced liver injury. He has a long-standing interest in understanding the roles of hepatic cholesterol and bile acid metabolism in liver health and diseases. His lab also studies regulation of lipid, glucose, and energy metabolism in obesity and type-2 diabetes. He has authored over 80 publications and 6 book chapters. His research has been continuously supported by NIH fundings. He serves on journal editorial boards and study sections for NIH, VA, AASLD, etc.