PSLA FALL 2025 SEMINAR SERIES

WITH DR. CHANG-JUN LIU

Brookhaven National Laboratory

BIOSYNTHESIS AND METABOLIC ENGINEERING OF PHENYLPROPANOIDS

PHENYLPROPANOID METABOLISM PRODUCES DIVERSE PHENOLICS—FROM FLAVONOIDS TO LIGNIN—VITAL FOR PLANT GROWTH AND DEFENSE. IN THIS TALK, I WILL PRESENT OUR RECENT WORK UNCOVERING CYTOCHROME B5–P450 ELECTRON TRANSFER IN SYRINGYL-LIGNIN FORMATION, CLARIFYING THE PHENYLALANINE-DERIVED SALICYLIC ACID PATHWAY, AND ENGINEERING O-METHYLTRANSFERASES TO ENHANCE BIOMASS DIGESTIBILITY AND GENERATE VALUABLE PHENOLIC BIOPRODUCTS

DATE

11.10.25

12 PM - 1 PM

LOCATION

PLS BUILDING RM 2107/2109

COLLEGE OF AGRICULTURE & NATURAL RESOURCES

DEPARTMENT OF PLANT SCIENCE AND LANDSCAPE ARCHITECTURE

Speaker Bio: Chang-Jun Liu is a Senior Plant Biochemist and Principal Investigator in the Biology Department at Brookhaven National Laboratory, and serves as a Scientific Lead and Project Lead at the Joint BioEnergy Institute (JBEI) and the Center for Bioenergy Innovation (CBI), two of the U.S. Department of Energy's Bioenergy Research Centers. He earned his Ph.D. in Plant Genetics from the Shanghai Institute of Plant Physiology, Chinese Academy of Sciences, in 1999. Since joining Brookhaven National Laboratory in 2005, he has led a research group focused on elucidating and optimizing lignocellulosic biomass formation