PSLA FALL 2026 SEMINAR SERIES

WITH DR. HONG QIAO
University of Texas at Austin

METABOLISM MEETS CHROMATIN: INTEGRATING HORMONE SIGNALING AND ENVIRONMENTAL ADAPTATION

CELLS HAVE A REMARKABLE ABILITY TO SENSE DIVERSE ENVIRONMENTS AND REPROGRAM THEIR ENERGY METABOLISM AND PROLIFERATIVE CAPACITY ACCORDINGLY, BUT IMBALANCES BETWEEN METABOLISM AND CHROMATIN ACTIVITIES CAN TRIGGER SEVERE DISEASES. USING ARABIDOPSIS, WE STUDY THE INTERPLAY BETWEEN METABOLISM, CHROMATIN REGULATION, AND TRANSCRIPTIONAL CONTROL IN ETHYLENE SIGNALING AND STRESS RESPONSES. OUR GOAL IS TO UNCOVER HOW MITOCHONDRIAL-NUCLEAR COORDINATION MODULATES THESE PROCESSES TO CONTROL TRANSCRIPTIONAL RESPONSES TO STRESS VIA HORMONE SIGNALING PATHWAYS, WITH BROAD IMPLICATIONS FOR UNDERSTANDING DISEASES LINKED TO CHROMATIN AND METABOLIC DYSFUNCTIONS.

DATE
9.28.26
12 PM - 1 PM

LOCATION
PLS BUILDING RM 2107/2109

COLLEGE OF AGRICULTURE & NATURAL RESOURCES
DEPARTMENT OF PLANT SCIENCE AND LANDSCAPE ARCHITECTURE

Speaker Bio: Dr. Qiao is a Professor of Molecular Biosciences at The University of Texas at Austin specializing in developmental, genetic, and molecular biology. Her research has received numerous national and international honors, including China's National Natural Science Award, National Excellent Doctoral Dissertation Award, NAASC Early Career Researcher Award, and multiple institutional and professional awards.