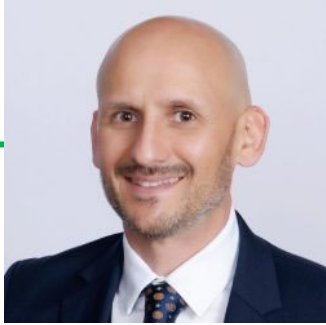


BioFrontiers - Biology Seminar

September 4, 2026; 2:30 PM

Life Sciences Building - A117



Dr. Jaime Barros-Rios

Assistant Professor
Division of Plant Science & Technology
University of Missouri

Lignin Engineering Strategies for Biomanufacturing

Lignin is a major component of plant secondary cell walls and plays essential roles in vascular function, mechanical support, and stress resistance. At the same time, its complex structure presents major challenges for biomass utilization. Our research focuses on understanding lignin biosynthesis and using this knowledge to engineer lignin composition and structure in plants. In poplar, we are developing new lignin chemistries to create polymers with improved properties for downstream conversion and bioproduct synthesis. This seminar will highlight our recent work on lignin biosynthesis, pathway engineering, and the development of designer lignins as a platform for sustainable biomanufacturing.

