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Seminars 23/24

Unveiling the
Amphiphilic Nature,
Characteristics and
Diverse Applications of
Fungal Hydrophobins
through Protein
Engineering

This talk will explore the multifaceted world of fungal hydrophobins, emphasizing their amphiphilic nature and astounding diversity. Analyzing the role of hydrophobins in conidiospore dispersal and survival dynamics, we conduct a comprehensive comparative molecular dynamics analysis and a detailed physiochemical analysis of hydrophobins produced in Pichia pastoris. These amphiphilic molecules have a variety of versatile applications beyond unraveling their molecular complexity. From enhancing crop resilience to their potential in diverse biotechnological, health, and pharmaceutical contexts, hydrophobins offer practical solutions to contemporary problems.