



SPEECH INFORMATION (For Conference Program Book)

Topic	Current Development of Next Generation Probiotics for Bioindustry Applications
Abstract	<p>The field of microbiome research has profoundly reshaped human health. Especially, the potential of fecal microbiota transplantation (FMT) as preventive or therapeutic interventions are highlighted. Whereas the benefits of traditional probiotics are well-reckoned, their efficacy and mechanisms of actions (MOA) remain not totally clarified. Besides, whereas the long-term FMT effects in multiple indications are still being evaluated, recent advancement in next generation sequencing (NGS) have revealed novel probiotics in potential health benefits. These paved the road for identification of important next-generation probiotics (NGPs). NGPs, unraveled through bioinformatics, are rapidly developed to address chronic inflammation disease. In this presentation, I will present the current research on NGP safety, efficacy, stability, and their potential applications in preventing and treating chronic diseases including diabetes, obesity, colityis and aGVHD ...etc.. I will explore the physiological characteristics, safety profiles, and MOA of various NGP species/strains, while also addressing the challenges and opportunities in the aspect of their application in clinical practice. The potential of NGPs to revolutionize microbiome-based therapies and improve clinical outcomes is encountered with high hurdles. These underscored the necessity for further research to identify their efficacy and ensure their safety.</p>

