



International Alliance for
Biological Standardization

11th Annual Statistics Workshop: Big Tent Statistics - Conveying the Importance of Statistical Contributions

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Virtual Meeting

Title: DoE as a process discovery tool in compositional systems

The human microbiome and its impact on human health is a dynamic discovery space. The development of live biotherapeutic products (LBPs) to influence patient microbiomes is an emerging field containing multiple treatment paths. Described by composition, microbiome communities are defined by the relative abundances of organisms to each other rather than absolute values. Through early and frequent collaboration, scientists and statisticians clarified goals, selected designs, and implement a DoE based discovery platform to maximize limited development cycles. The multiple design types were leveraged to understand factors that influence and shape the composition of a broad consortium LBP. The result of this collaboration was an early-stage clinical asset delivered ahead of schedule.

