ABSTRACT

Title: Yeast display technology enables rapid discovery of potent macrocyclic peptide ligands against diverse protein targets

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Presenting: Sara Linciano

Abstract content:

Macrocyclic peptides are valuable molecular scaffolds for drug development, bridging the gap between small molecules and large biologics. We recently developed a yeast-based combinatorial platform for the high-throughput screening and characterization of these ligands. By integrating flow cytometry with next-generation sequencing, our platform can screen millions of variants per hour, allowing for real-time monitoring and the precise tuning of binding properties. In this presentation, I will discuss our progress in applying yeast display technology to rapidly generate and molecularly evolve macrocyclic peptides with optimized binding properties for the development of potential therapeutics.