

MIT Industrial Liaison Program Faculty Knowledgebase Report

2026 MIT AI Conference

April 14, 2026 8:00 am - 5:00 pm

AI-Enabled Biological Discovery From Millions of Microbial Genomes

Yunha Hwang

Microbial genomes encode the largest molecular, biochemical and functional diversity on Earth, however, much of this diversity remains uncharacterized. Dr. Hwang's talk will focus on machine learning models and experimental approaches to discover and design novel microbial functions. These approaches enable more systematic identification of microbial capabilities and have applications in biomanufacturing, natural product discovery, and microbial technologies.