

# Metaboverse: Metabolic network pattern recognition tools contextualize multi-omic data and reveal disease-relevant signatures

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Due to the scale and complexity inherent in metabolism, systems approaches that are easily accessible to the general researcher are necessary. We developed Metaboverse, a user-friendly, interactive, and cross-platform analysis and visualization tool for data layered on metabolic networks. Metaboverse offers the ability to integrate multi-omic, multi-condition, time course, and metabolomics tracing datasets on over ninety model organisms. We developed a search engine that comprehensively searches and analyzes the network for complex regulatory patterns within the sequencing, proteomics, and metabolomics data, integrating enzyme information into the metabolic network to create a robust search space. This framework will be foundational in allowing users to analyze their data in a more holistic manner that integrates all measured information of their biological system to rapidly identify interesting regulatory patterns within the global metabolic network.

View interactive poster



View pre-print for novel biological insights found by Metaboverse

