IS2-4

Databases of Animal Gut Bacterial Communities with Manually Curated Metadata

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The number of available gut microbiome data in public databases is continually increasing. However, public databases with raw sequencing data do not contain taxonomic profiles and curated metadata, making it difficult to explore the relationship between gut microbiota and hosts. Here I present two databases that overcome these limitations: Murine Microbiome Database (MMDB) and Animal Microbiota Database (AMDB). These databases provide taxonomic profiles for high-quality samples with manually curated metadata. MMDB contains taxonomic profiles of the gut microbiota in healthy mice with detailed metadata including sampling locations, genotypes, and vendors. AMDB is a database of gut microbiota in various animal species, allowing for easy exploration of relationships between the gut microbiota and host characteristics, specifically host phylogeny and diet. These databases will contribute to a better understanding of the gut microbiota in hosts with easy-to-use interfaces and interactive visualizations. MMDB and AMDB are publicly available at http://leb.snu.ac.kr/mmdb and http://leb.snu.ac.kr/amdb, respectively.