

Unified Framework for Sparse Count Data

Common Challenges

High Sparsity (70-95%) | Zero-Inflation | Overdispersion

Library Size Variation | Compositional Effects

**Microbiome
(16S/ITS)**

**Virome
(Metagenome)**

**scRNA-seq
(UMI counts)**

Composable DAA Toolkit

ZINB | Hurdle | LinDA | Permutation | Spike-in Validation