

RNA-seq Workflow

Experimental Design

Plan your study carefully with appropriate controls and biological questions

Replication Strategies

Biological replicates (≥ 3) are essential for statistical power

Batch Effect Prevention

Randomize sample processing to avoid confounding variables

Power Analysis

Determine sample size needed to detect biological effects

Cost Optimization

Balance sequencing depth and sample number for your budget

 **Key Recommendation**

More biological replicates with moderate depth > few samples with deep sequencing

