gene expression RNA sequencing experiment Replicate type

Colonies

categorya

Replicate

R

R

R Т

Т

Λp

Strains Cohoused groups Gender

Individuals Organs from sacrificed animals

Table 1 | Replicate hierarchy in a hypothetical mouse single-cell

Individual cells

Methods for dissociating cells from tissue Dissociation runs from given tissue sample

aReplicates are categorized as biological (B), technical (T) or of variable type (V). Seguence reads serve diverse purposes depending on the application and how reads are used in analysis.

RNA-seg library construction

Seauencina Runs from the library of a given cell Reads from different transcript molecules

Reads with unique molecular identifier (UMI)

Animal

subjects

Sample

preparation

study

from a given transcript molecule