

RNAseq Analysis

1. Adjective
2. Verb - Base Form
3. Noun
4. Adjective
5. Noun
6. Adjective
7. Verb - Base Form
8. Noun
9. Noun
10. Noun - Plural
11. Noun
12. Adverb
13. Noun
14. Verb - Base Form
15. Verb - Present Ends In Ing
16. Noun - Plural
17. Noun
18. Adjective
19. Noun
20. Verb - Base Form
21. Noun - Plural
22. Noun
23. Verb - Base Form

24. Adjective

RNAseq Analysis

Anthony Hall already gave an _____ Adjective _____ introduction to RNA-seq, so I will only _____ Verb - Base Form _____ a brief review. RNA-seq refers to the _____ Noun _____ of using _____ Adjective _____ parallel sequencing to obtain global information on an RNA component from an _____ Noun _____. This could be poly(A) RNA (representing mRNA), total RNA, _____ Adjective _____ RNA, or some other fraction. Here we _____ Verb - Base Form _____ on analysis of poly(A) RNA.

There are many questions that can be answered from RNA-seq data. RNA-seq data

can be used to:

Determine which _____ Noun _____ of a genome are expressed

Annotate a _____ Noun _____

Find splice or alternative splice sites

Examine _____ Noun - Plural _____ in expressed genes

Use de novo assembly in organisms with no _____ Noun _____ to assemble a set of cDNAs.

Find genes that are _____ Adverb _____ expressed between treatments, _____ Noun _____, timepoints, etc.

This lab will _____ Verb - Base Form _____ on differential expression and on polymorphism discovery.

_____ Verb - Present ends in ING _____ RNA-seq data is an evolving field and there are no truly plug-and-play _____ Noun - Plural _____. The basic steps are to:

Perform a quality control analysis of the _____ Noun _____

Filter reads to remove:

o Reads of _____ Adjective _____ quality

o Adapter contamination

o rRNA or other _____ Noun _____

_____ Verb - Base Form _____ reads to a reference genome or cDNA set.

Normalize read counts between _____ Noun - Plural _____

Fit a statistical _____ Noun _____ to _____ Verb - Base Form _____ for genes that are significantly _____ Adjective _____ expressed.