

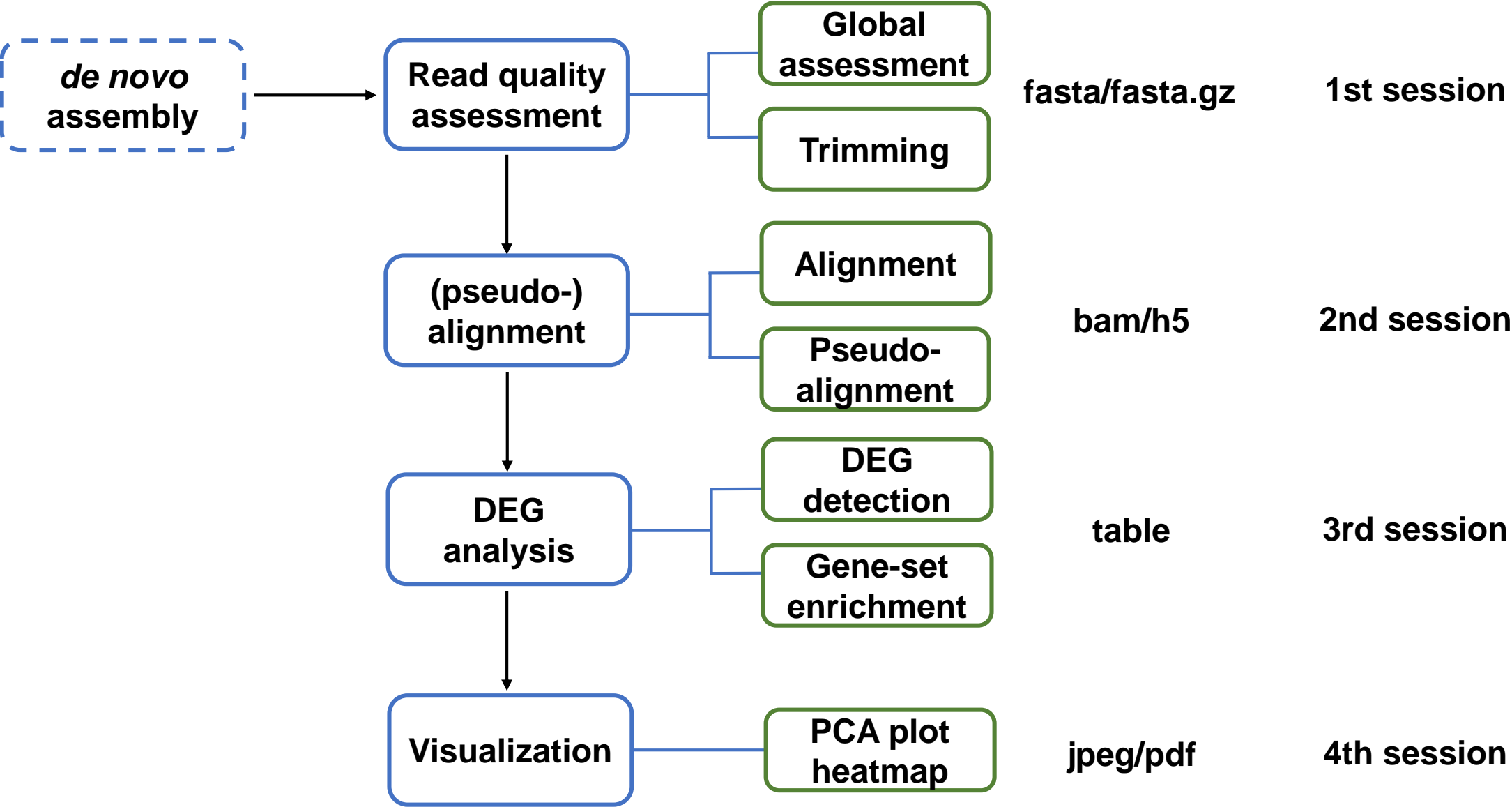


# Overview of RNA-Seq data analysis workflows

SPP workshop  
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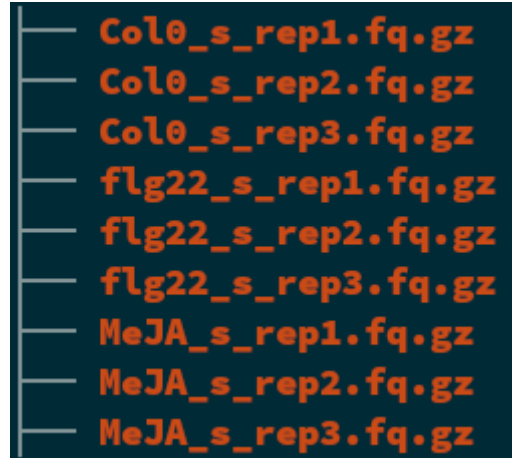
# 1. RNA-Seq analysis workflow



The workflow is not appropriate for **microRNA**, **circular RNA**, or **single-cell RNA** analysis.

## 2. RNA-Seq data sets

### single-end RNA-Seq

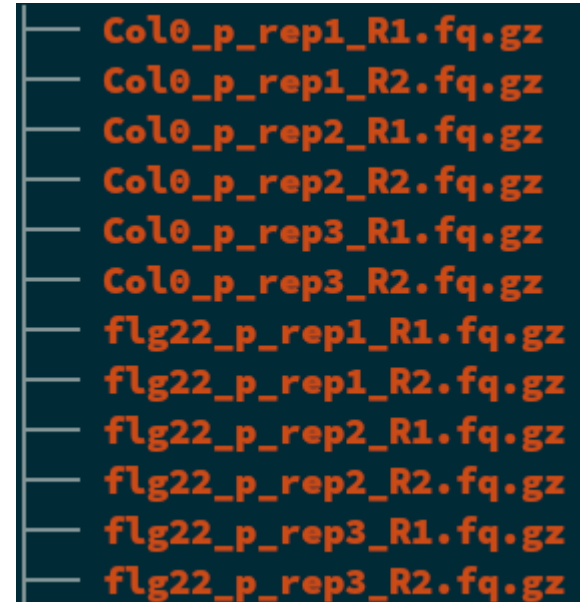


A list of nine single-end RNA-Seq data files, each preceded by a horizontal line. The files are: Col0\_s\_rep1.fq.gz, Col0\_s\_rep2.fq.gz, Col0\_s\_rep3.fq.gz, flg22\_s\_rep1.fq.gz, flg22\_s\_rep2.fq.gz, flg22\_s\_rep3.fq.gz, MeJA\_s\_rep1.fq.gz, MeJA\_s\_rep2.fq.gz, and MeJA\_s\_rep3.fq.gz.

- Col0\_s\_rep1.fq.gz
- Col0\_s\_rep2.fq.gz
- Col0\_s\_rep3.fq.gz
- flg22\_s\_rep1.fq.gz
- flg22\_s\_rep2.fq.gz
- flg22\_s\_rep3.fq.gz
- MeJA\_s\_rep1.fq.gz
- MeJA\_s\_rep2.fq.gz
- MeJA\_s\_rep3.fq.gz

Castrillo G, Teixeira PJ,  
Paredes SH et. al., 2017

### pair-end RNA-Seq



A list of twelve pair-end RNA-Seq data files, each preceded by a horizontal line. The files are: Col0\_p\_rep1\_R1.fq.gz, Col0\_p\_rep1\_R2.fq.gz, Col0\_p\_rep2\_R1.fq.gz, Col0\_p\_rep2\_R2.fq.gz, Col0\_p\_rep3\_R1.fq.gz, Col0\_p\_rep3\_R2.fq.gz, flg22\_p\_rep1\_R1.fq.gz, flg22\_p\_rep1\_R2.fq.gz, flg22\_p\_rep2\_R1.fq.gz, flg22\_p\_rep2\_R2.fq.gz, flg22\_p\_rep3\_R1.fq.gz, and flg22\_p\_rep3\_R2.fq.gz.

- Col0\_p\_rep1\_R1.fq.gz
- Col0\_p\_rep1\_R2.fq.gz
- Col0\_p\_rep2\_R1.fq.gz
- Col0\_p\_rep2\_R2.fq.gz
- Col0\_p\_rep3\_R1.fq.gz
- Col0\_p\_rep3\_R2.fq.gz
- flg22\_p\_rep1\_R1.fq.gz
- flg22\_p\_rep1\_R2.fq.gz
- flg22\_p\_rep2\_R1.fq.gz
- flg22\_p\_rep2\_R2.fq.gz
- flg22\_p\_rep3\_R1.fq.gz
- flg22\_p\_rep3\_R2.fq.gz

Völz R et. al., 2019

# **Hands-on session: Read quality assessment and *de novo* transcriptome assembly**

[https://github.com/YulongNiu/MPIPZ\\_SPP\\_workshop/blob/master/RNA-Seq/tutorials/RNA-Seq\\_quality\\_assessment.md](https://github.com/YulongNiu/MPIPZ_SPP_workshop/blob/master/RNA-Seq/tutorials/RNA-Seq_quality_assessment.md)

[https://github.com/YulongNiu/MPIPZ\\_SPP\\_workshop/blob/master/RNA-Seq/tutorials/RNA-Seq\\_devo\\_assembly.md](https://github.com/YulongNiu/MPIPZ_SPP_workshop/blob/master/RNA-Seq/tutorials/RNA-Seq_devo_assembly.md)