# FeatureCounts explore

#### Emeline Favreau

15/02/2021

Copyright 2021 Emeline Favreau, University College London.

#### Objective of analysis

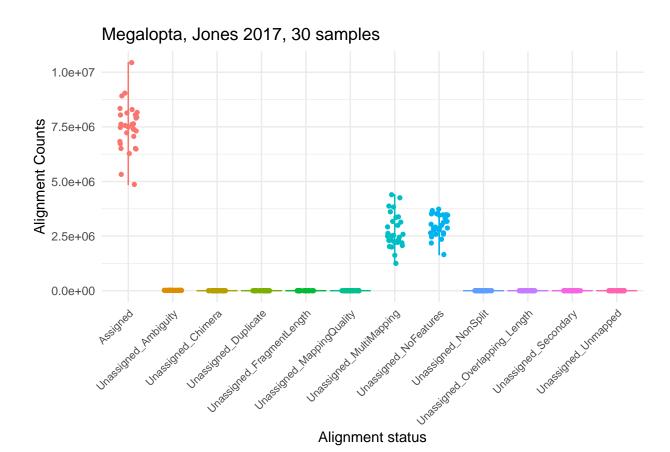
Exploring the results of FeatureCounts per species. We aim to have a high ratio of Assigned:Unassigned alignments.

#### Analysis steps:

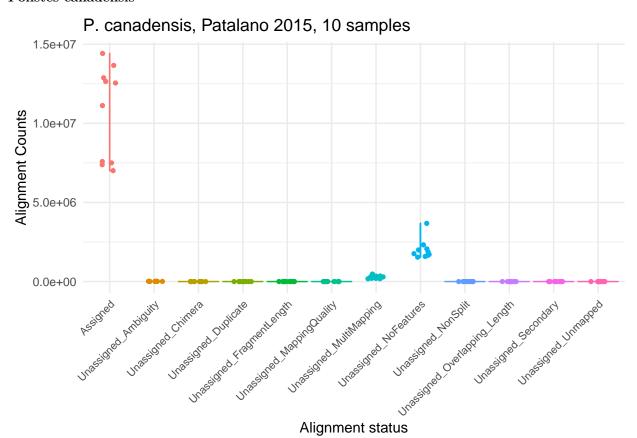
- Obtaining data
- Aim 1: Megalopta genalis
- Aim 2: Polistes canadensis Patalano
- Aim 3: Polistes dominula Taylor
- Aim 4: Liostenogaster flavolineata Taylor
- Aim 5: Ceratina australensis Rehan 2018

#### Megalopta genalis

We ran Nextflow pipeline twice, because samples were prepared using a strand aware library, resulting in half the samples presenting a forward strandedness status and the other half a reverse strandedness. The forward-stranded samples were run with Neftlow flag –forwardstranded, and the reverse-stranded samples –reverseStranded. This produced comparable results from featureCounts.

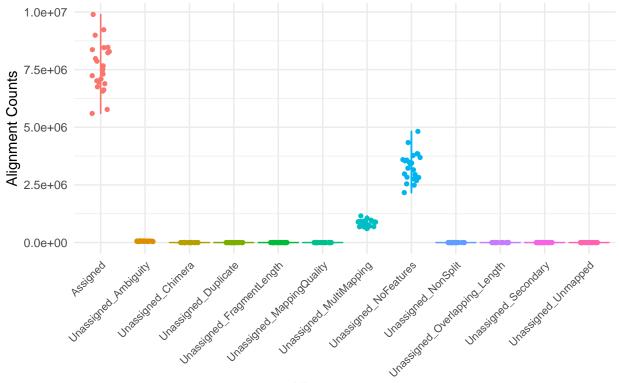


### Polistes canadensis



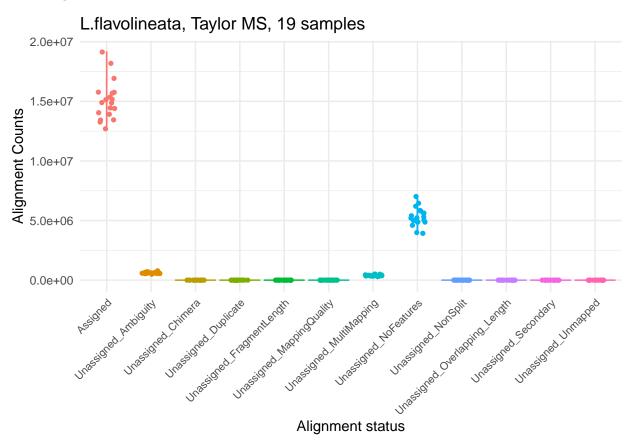
### Polistes dominula

# P. dominula, Taylor 2020, 24 samples

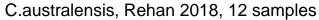


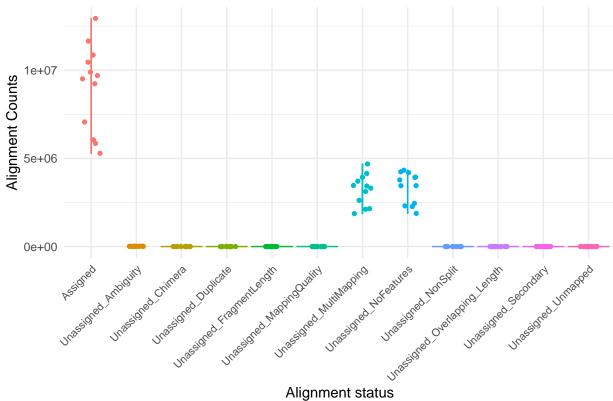
Alignment status

# Liostenogaster flavolineata



### Ceratina australensis





## Conclusion

So far, most of the aligned reads are assigned to features (such as exon, gene, CDS).