pyrpipe report

file name:pyrpipe_logs/2020-01-22-18_14_47_pyrpipe.log

Summary

Time start: 2020-01-22 18:14:47 Time end: 2020-01-22 23:56:24

Total time: 5:41:37

Num commands: 15

Num failed commands: 1

Num passed commands: 14

Total programs: 7

Programs: stringtie, prefetch, fasterg-dump, STAR, plncpro

predict,trim_galore,gffread

Details

command

prefetch -0 /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/ maize/SRR3098746 SRR3098746

stdout

```
2020-01-22T23:14:50 prefetch.2.10.0: 1) Downloading 'SRR3098746'...
2020-01-22T23:14:50 prefetch.2.10.0: Downloading via https...
2020-01-22T23:23:00 prefetch.2.10.0: https download succeed 2020-01-22T23:23:00 prefetch.2.10.0: 1) 'SRR3098746' was downloaded successfully 2020-01-22T23:23:00 prefetch.2.10.0: 'SRR3098746' has 0 unresolved dependencies
```

| Program | Return code | Start | Runtime | Version |
|----------|----------------|----------------------|---------|--|
| prefetch | | 20-01-22 18:14:49 | 0:08:11 | /pylon5/mc5pl7p/usingh/lib/ sratoolkit.2.10.0- centos_linux64/bin/prefetch : 2.10.0 |

prefetch -0 /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/ maize/SRR3098745 SRR3098745

stdout

```
2020-01-22T23:23:01 prefetch.2.10.0: 1) Downloading 'SRR3098745'...
2020-01-22T23:23:01 prefetch.2.10.0: Downloading via https...
2020-01-22T23:28:35 prefetch.2.10.0 int: timeout exhausted while reading file within network system module - Cannot KStreamRead: https://sra-downloadb.be-md.ncbi.nlm.nih.gov/sos2/sra-pub-run-7/SRR3098745/SRR3098745.1
2020-01-22T23:28:35 prefetch.2.10.0: https://sra-download failed 2020-01-22T23:28:35 prefetch.2.10.0: 1) failed to download SRR3098745
```

stderr

| Program | Return code | Start | Runtime | Version |
|----------|----------------|----------------------|---------|--|
| prefetch | 3 | 20-01-22 18:23:00 | 0:05:35 | /pylon5/mc5pl7p/usingh/lib/ sratoolkit.2.10.0- centos_linux64/bin/prefetch : 2.10.0 |

command

prefetch -0 /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/ maize/SRR3098744 SRR3098744

stdout

2020-01-22T23:28:38 prefetch.2.10.0: 1) Downloading

```
'SRR3098744'...
2020-01-22T23:28:38 prefetch.2.10.0: Downloading via https...
2020-01-22T23:35:21 prefetch.2.10.0: https download succeed 2020-01-22T23:35:21 prefetch.2.10.0: 1) 'SRR3098744' was downloaded successfully 2020-01-22T23:35:21 prefetch.2.10.0: 'SRR3098744' has 0 unresolved dependencies
```

stderr

| Program | Return code | Start | Runtime | Version |
|----------|----------------|----------------------|---------|--|
| prefetch | 0 | 20-01-22 18:28:35 | 0:06:46 | /pylon5/mc5pl7p/usingh/lib/ sratoolkit.2.10.0- centos_linux64/bin/prefetch : 2.10.0 |

command

fasterq-dump -e 20 -f -t /pylon5/mc5pl7p/usingh/urmi/ pyrpipeTest/testDir/maize -0 /pylon5/mc5pl7p/usingh/urmi/ pyrpipeTest/testDir/maize/SRR3098746 -o SRR3098746.fastq / pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/ SRR3098746/SRR3098746.sra

stdout

spots read : 85,732,311
reads read : 171,464,622
reads written : 171,464,622

stderr

| Program | Return code | Start | Runtime | Version |
|--------------|-------------|-------------------|---------|---------|
| fasterq-dump | 0 | 20-01-22 18:35:21 | 0:01:15 | |

command

trim_galore --cores 10 --paired -o /pylon5/mc5pl7p/usingh/ urmi/pyrpipeTest/testDir/maize/SRR3098746 /pylon5/mc5pl7p/ usingh/urmi/pyrpipeTest/testDir/maize/SRR3098746/ SRR3098746_1.fastq /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/ testDir/maize/SRR3098746/SRR3098746_2.fastq Using an excessive number of cores has a diminishing return! It is recommended not to exceed 8 cores per trimming process (you asked for 10 cores). Please consider re-specifying Path to Cutadapt set as: 'cutadapt' (default)

Cutadapt seems to be working fine (tested command 'cutadapt
--version')

Cutadapt version: 2.6

Cutadapt seems to be using Python 3! Proceeding with multicore enabled Cutadapt using 10 cores

Parallel gzip (pigz) detected. Proceeding with multicore (de)compression using 10 cores

No quality encoding type selected. Assuming that the data provided uses Sanger encoded Phred scores (default)

Output will be written into the directory: /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/SRR3098746/

AUTO-DETECTING ADAPTER TYPE

Attempting to auto-detect adapter type from the first 1 million sequences of the first file (>> /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/SRR3098746/SRR3098746 1.fastq <<)

Found perfect matches for the following adapter sequences:

Adapter type Count Sequence Sequences

analysed Percentage

Illumina 10739 AGATCGGAAGAGC 1000000 1.07 smallRNA 0 TGGAATTCTCGG 1000000 0.00

Nextera 0 CTGTCTCTTATA 1000000 0.00

Using Illumina adapter for trimming (count: 10739). Second best hit was smallRNA (count: 0)

Writing report to '/pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/
testDir/maize/SRR3098746/
SRR3098746 1.fastq trimming report.txt'

SUMMARISING RUN PARAMETERS

Input filename: /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/

testDir/maize/SRR3098746/SRR3098746 1.fastq

Trimming mode: paired-end

Trim Galore version: 0.6.4 dev

Cutadapt version: 2.6

Python version: 3.6.3 :: Intel Corporation

Number of cores used for trimming: 10

Quality Phred score cutoff: 20

Quality encoding type selected: ASCII+33

```
Adapter sequence: 'AGATCGGAAGAGC' (Illumina TruSeg, Sanger
iPCR; auto-detected)
Maximum trimming error rate: 0.1 (default)
Minimum required adapter overlap (stringency): 1 bp
Minimum required sequence length for both reads before a
sequence pair gets removed: 20 bp
Cutadapt seems to be fairly up-to-date (version 2.6).
Setting -i 10
Writing final adapter and quality trimmed output to
SRR3098746 1 trimmed.fg
 >>> Now performing quality (cutoff '-q 20') and adapter
trimming in a single pass for the adapter sequence:
'AGATCGGAAGAGC' from file /pylon5/mc5pl7p/usingh/urmi/
pyrpipeTest/testDir/maize/SRR3098746/SRR3098746 1.fastg <<</pre>
10000000 sequences processed
20000000 sequences processed
30000000 sequences processed
40000000 sequences processed
50000000 sequences processed
60000000 sequences processed
70000000 sequences processed
80000000 sequences processed
This is cutadapt 2.6 with Python 3.6.3
Command line parameters: -j 10 -e 0.1 -g 20 -0 1 -a
AGATCGGAAGAGC /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/
testDir/maize/SRR3098746/SRR3098746 1.fastq
Processing reads on 10 cores in single-end mode ...
Finished in 200.35 s (2 us/read; 25.67 M reads/minute).
=== Summary ===
Total reads processed:
                                   85,732,311
Reads with adapters:
                                   21,391,002 (25.0%)
Reads written (passing filters): 85,732,311 (100.0%)
Total basepairs processed: 10,802,271,186 bp
Quality-trimmed:
                 131,091,920 bp (1.2%)
Total written (filtered): 10,608,673,685 bp (98.2%)
=== Adapter 1 ===
Sequence: AGATCGGAAGAGC; Type: regular 3'; Length: 13;
Trimmed: 21391002 times.
No. of allowed errors:
0-9 bp: 0; 10-13 bp: 1
Bases preceding removed adapters:
 A: 27.4%
```

C: 32.4% G: 22.5% T: 17.6%

none/other: 0.1%

Overview of removed sequences

| | w or remo | | | | | |
|-------------|-----------|----------|---------|--------|---------|----------|
| length | count | expect | max.err | | | |
| 1 | 13192893 | 3 | 2143307 | 7.8 | 0 | 13192893 |
| 2 | 5112936 | 5358269 | . 4 | 0 | 5112936 | |
| 3 | 1098625 | 1339567 | . 4 | 0 | 1098625 | |
| 2 3 4 | 389713 | 334891.8 | | 0 | 389713 | |
| | 113158 | 83723.0 | | 113158 | | |
| 6 | 98100 | 20930.7 | 0 | 98100 | J | |
| 5 6 7 | 89746 | 5232.7 | | 89746 | | |
| | | | 0 | | | |
| 8 | 78166 | 1308.2 | 0 | 78166 | 010 | |
| 9 | 50635 | 327.0 | 0 | 49825 | | |
| 10 | 94576 | 81.8 | 1 | 92306 | | |
| 11 | 31106 | 20.4 | 1 | 29945 | | |
| 12 | 56660 | 5.1 | 1 | 55404 | | |
| 13 | 70914 | 1.3 | 1 | 69391 | 1523 | |
| 14 | 33934 | 1.3 | 1 | 33115 | 819 | |
| 15 | 63389 | 1.3 | 1 | 62005 | 1384 | |
| 16 | 23403 | 1.3 | 1 | 22731 | 672 | |
| 17 | 45683 | 1.3 | 1 | 44411 | | |
| 18 | 62366 | 1.3 | 1 | 61084 | | |
| 19 | 22113 | 1.3 | 1 | 21452 | | |
| 20 | 52382 | 1.3 | 1 | 51374 | | |
| 21 | 25385 | 1.3 | 1 | 24745 | | |
| 22 | 33807 | 1.3 | 1 | 33092 | | |
| | | | | | | |
| 23 | 40007 | 1.3 | 1 | 39201 | | |
| 24 | 22327 | 1.3 | 1 | 21772 | | |
| 25 | 49372 | 1.3 | 1 | 48554 | | |
| 26 | 5074 | 1.3 | 1 | 4842 | | |
| 27 | 31287 | 1.3 | 1 | 30612 | | |
| 28 | 38546 | 1.3 | 1 | 37871 | | |
| 29 | 14784 | 1.3 | 1 | 14436 | 348 | |
| 30 | 28962 | 1.3 | 1 | 28580 | 382 | |
| 31 | 14838 | 1.3 | 1 | 14560 | 278 | |
| 32 | 29229 | 1.3 | 1 | 28768 | 461 | |
| 33 | 9613 | 1.3 | 1 | 9425 | 188 | |
| 34 | 21462 | 1.3 | 1 | 21113 | | |
| 35 | 9728 | 1.3 | 1 | 9505 2 | | |
| 36 | 21908 | 1.3 | 1 | 21635 | | |
| 37 | 4881 | 1.3 | 1 | 4773 | | |
| 38 | 14504 | 1.3 | 1 | 14250 | | |
| | | | | | | |
| 39 | 13204 | 1.3 | 1 | 12954 | | |
| 40 | 10913 | 1.3 | 1 | 10625 | | |
| 41 | 11776 | 1.3 | 1 | 11562 | | |
| 42 | 10515 | 1.3 | 1 | 10350 | | |
| 43 | 13334 | 1.3 | 1 | 13175 | | |
| 44 | 3805 | 1.3 | 1 | 3698 | | |
| 45 | 5264 | 1.3 | 1 | 5176 8 | 88 | |
| | | | | | | |

| 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 | 2136 6800 3946 6945 3233 5023 1915 4105 4279 3798 1079 2741 2841 1079 2676 1571 939 2064 1698 882 1218 1146 | 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 2070 66 6693 107 3868 78 6840 105 3166 67 4956 67 1871 44 4021 84 4192 87 3724 74 1028 51 2688 53 2788 53 1037 42 2636 40 1526 45 874 65 2014 50 1636 62 796 86 1157 61 1081 65 |
|--|--|---|---|--|
| 61 | 1571 | 1.3 | 1 | 1526 45 |
| 62 | 939 | 1.3 | 1 | 874 65 |
| 63 | 2064 | 1.3 | 1 | 2014 50 |
| 65 | 882 | 1.3 | 1 | 796 86 |
| 66 | 1218 | 1.3 | | 1157 61 |
| 68 69 70 71 | 1164 1217 1183 1266 | 1.3 1.3 1.3 | 1 1 1 | 1044 120 1064 153 996 187 947 319 |
| 72 73 74 75 | 1345 1718 2634 11847 | 1.3 1.3 1.3 | 1 1 1 | 956 389 951 767 956 1678 1175 10672 |
| 76 | 11015 | 1.3 | 1 | 3209 7806 |
| 77 | 6050 | 1.3 | 1 | 1577 4473 |
| 78 | 3394 | 1.3 | 1 | 545 2849 |
| 79 | 1928 | 1.3 | 1 | 232 1696 |
| 80 | 1256 | 1.3 | 1 | 154 1102 |
| 81 | 718 | 1.3 | 1 | 120 598 |
| 82 | 528 | 1.3 | 1 | 107 421 |
| 83 | 374 | 1.3 | 1 | 75 299 |
| 84 | 308 | 1.3 | 1 | 76 232 |
| 85 | 303 | 1.3 | 1 | 76 227 |
| 86 | 267 | 1.3 | 1 | 67 200 |
| 87 | 260 | 1.3 | 1 | 72 188 |
| 88 | 191 | 1.3 | 1 | 41 150 |
| 89 90 91 92 93 | 194 191 167 123 136 | 1.3 1.3 1.3 1.3 | 1 1 1 1 | 54 140 50 141 56 111 32 91 47 89 |
| 94 | 126 | 1.3 | 1 | 35 91 |
| 95 | 144 | 1.3 | 1 | 42 102 |
| 96 | 146 | 1.3 | 1 | 36 110 |
| 97 | 117 | 1.3 | 1 | 25 92 |

| 98 | 122 | 1.3 | 1 | 24 98 |
|-----|------|-----|---|---------|
| 99 | 137 | 1.3 | 1 | 41 96 |
| 100 | 119 | 1.3 | 1 | 32 87 |
| 101 | 106 | 1.3 | 1 | 20 86 |
| 102 | 114 | 1.3 | 1 | 24 90 |
| 103 | 102 | 1.3 | 1 | 23 79 |
| 104 | 101 | 1.3 | 1 | 22 79 |
| 105 | 83 | 1.3 | 1 | 15 68 |
| 106 | 86 | 1.3 | 1 | 18 68 |
| 107 | 87 | 1.3 | 1 | 18 69 |
| 108 | 89 | 1.3 | 1 | 11 78 |
| 109 | 64 | 1.3 | 1 | 19 45 |
| 110 | 83 | 1.3 | 1 | 10 73 |
| 111 | 71 | 1.3 | 1 | 6 65 |
| 112 | 88 | 1.3 | 1 | 18 70 |
| 113 | 98 | 1.3 | 1 | 17 81 |
| 114 | 97 | 1.3 | 1 | 21 76 |
| 115 | 83 | 1.3 | 1 | 19 64 |
| 116 | 74 | 1.3 | 1 | 15 59 |
| 117 | 78 | 1.3 | 1 | 10 68 |
| 118 | 84 | 1.3 | 1 | 8 76 |
| 119 | 102 | 1.3 | 1 | 6 96 |
| 120 | 122 | 1.3 | 1 | 9 113 |
| 121 | 151 | 1.3 | 1 | 12 139 |
| 122 | 182 | 1.3 | 1 | 7 175 |
| 123 | 267 | 1.3 | 1 | 7 260 |
| 124 | 414 | 1.3 | 1 | 7 407 |
| 125 | 856 | 1.3 | 1 | 5 851 |
| 126 | 9495 | 1.3 | 1 | 33 9462 |
| | | | | |

RUN STATISTICS FOR INPUT FILE: /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/SRR3098746/SRR3098746_1.fastq

85732311 sequences processed in total

The length threshold of paired-end sequences gets evaluated later on (in the validation step)

Writing report to '/pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/SRR3098746/ SRR3098746 2.fastq trimming report.txt'

SUMMARISING RUN PARAMETERS

Input filename: /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/

testDir/maize/SRR3098746/SRR3098746_2.fastq

Trimming mode: paired-end

Trim Galore version: 0.6.4 dev

Cutadapt version: 2.6

Python version: 3.6.3 :: Intel Corporation

Number of cores used for trimming: 10

Quality Phred score cutoff: 20

Quality encoding type selected: ASCII+33

```
Adapter sequence: 'AGATCGGAAGAGC' (Illumina TruSeg, Sanger
iPCR; auto-detected)
Maximum trimming error rate: 0.1 (default)
Minimum required adapter overlap (stringency): 1 bp
Minimum required sequence length for both reads before a
sequence pair gets removed: 20 bp
Cutadapt seems to be fairly up-to-date (version 2.6).
Setting -j -j 10
Writing final adapter and quality trimmed output to
SRR3098746 2 trimmed.fg
 >>> Now performing quality (cutoff '-q 20') and adapter
trimming in a single pass for the adapter sequence:
'AGATCGGAAGAGC' from file /pylon5/mc5pl7p/usingh/urmi/
pyrpipeTest/testDir/maize/SRR3098746/SRR3098746 2.fastg <<</pre>
10000000 sequences processed
20000000 sequences processed
30000000 sequences processed
40000000 sequences processed
50000000 sequences processed
60000000 sequences processed
70000000 sequences processed
80000000 sequences processed
This is cutadapt 2.6 with Python 3.6.3
Command line parameters: -j 10 -e 0.1 -g 20 -0 1 -a
AGATCGGAAGAGC /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/
testDir/maize/SRR3098746/SRR3098746 2.fastq
Processing reads on 10 cores in single-end mode ...
Finished in 197.75 s (2 us/read; 26.01 M reads/minute).
=== Summary ===
Total reads processed:
                                   85,732,311
Reads with adapters:
                                   21,262,166 (24.8%)
Reads written (passing filters): 85,732,311 (100.0%)
Total basepairs processed: 10,802,271,186 bp
Quality-trimmed: 206,049,532 bp (1.9%)
Total written (filtered): 10,533,933,416 bp (97.5%)
=== Adapter 1 ===
Sequence: AGATCGGAAGAGC; Type: regular 3'; Length: 13;
Trimmed: 21262166 times.
No. of allowed errors:
0-9 bp: 0; 10-13 bp: 1
Bases preceding removed adapters:
 A: 30.3%
```

C: 24.9% G: 30.0% T: 14.8%

none/other: 0.0%

Overview of removed sequences

| length | count | expect | max.err | error | СО | unts | |
|-------------|---------|----------|----------|--------|----|---------|----------|
| 1 | 1155850 | • | 21433077 | | | 0 | 11558505 |
| 2 | 7023316 | 5358269 | . 4 | 0 | | 7023316 | |
| 2 3 4 | 820195 | 1339567 | . 4 | 0 | | 820195 | |
| | 240848 | 334891.8 | 3 | 0 | | 240848 | |
| 5 | 138298 | 83723.0 | 0 | 138298 | 3 | | |
| 5 6 7 | 104106 | 20930.7 | 0 | 104106 | 5 | | |
| | 134985 | 5232.7 | 0 | 134985 | 5 | | |
| 8 | 66205 | 1308.2 | 0 | 66205 | | | |
| 9 | 16805 | 327.0 | 0 | 15264 | 15 | 541 | |
| 10 | 112019 | 81.8 | 1 | 107082 | | | |
| 11 | | 20.4 | 1 | 7965 3 | | | |
| 12 | 91518 | | 1 | 88212 | | | |
| 13 | 16178 | | 1 | 14909 | | | |
| 14 | | 1.3 | 1 | 96361 | | | |
| 15 | 29918 | 1.3 | 1 | 28799 | | | |
| 16 | 17937 | 1.3 | 1 | 16981 | | | |
| 17 | 87866 | 1.3 | 1 | 85018 | | | |
| 18 | 6390 | 1.3 | 1 | 5864 5 | | | |
| 19 | 68018 | 1.3 | 1 | 66435 | | | |
| 20 | 32789 | 1.3 | 1 | 32002 | | | |
| 21 | 2049 | 1.3 | 1 | 1743 3 | | | |
| 22 | 37629 | 1.3 | 1 | 36382 | | | |
| 23 | 36520 | 1.3 | 1 | 35215 | | | |
| 24 | 71308 | _ | 1 | 69427 | | | |
| 25 | 17821 | 1.3 | 1 | 17213 | | | |
| 26 | 24906 | 1.3 | 1 | 24289 | | | |
| 27 | 3932 | 1.3 | 1 | 3631 3 | | | |
| 28 | 42457 | 1.3 | 1 | 41727 | | | |
| 29 | 2339 | 1.3 | 1 | 2109 2 | | | |
| 30 | 42208 | 1.3 | 1 | 41388 | | | |
| 31 | 3777 | 1.3 | 1 | 3556 2 | | | |
| 32 | 27739 | 1.3 | 1 | 27216 | | | |
| 33 | 19306 | 1.3 | 1 | 18835 | | | |
| 34 | 4352 | 1.3 | 1 | 4112 2 | | | |
| 35 | 24939 | 1.3 | 1 | 24423 | _ | _ | |
| 36 | 6747 | 1.3 | 1 | 6463 2 | | | |
| 37 | 13986 | 1.3 | 1 | 13647 | | _ | |
| 38 | 17084 | 1.3 | 1 | 16744 | _ | _ | |
| 39 | 8819 | 1.3 | 1 | 8590 2 | | | |
| 40 | 6307 | 1.3 | 1 | 6029 2 | | | |
| 41 | 11286 | 1.3 | 1 | 11000 | | | |
| 42 | 15099 | 1.3 | 1 | 14830 | | 59 | |
| 43 | 890 | 1.3 | 1 | 768 12 | | | |
| 44 | 8117 | 1.3 | 1 | 7916 2 | | | |
| 45 | 11792 | 1.3 | 1 | 11518 | 27 | 4 | |
| | | | | | | | |

| 46 | 4590 | 1.3 | 1 | 4472 118 |
|----|-------|-----|---|------------|
| 47 | 2649 | 1.3 | 1 | 2524 125 |
| 48 | 4913 | 1.3 | 1 | 4808 105 |
| | | | | |
| 49 | 6011 | 1.3 | 1 | 5857 154 |
| 50 | 2633 | 1.3 | 1 | 2536 97 |
| 51 | 8081 | 1.3 | 1 | 7923 158 |
| 52 | 3254 | 1.3 | 1 | 3153 101 |
| | | | | 2005 103 |
| 53 | 2108 | 1.3 | 1 | |
| 54 | 1492 | 1.3 | 1 | 1412 80 |
| 55 | 3210 | 1.3 | 1 | 3062 148 |
| 56 | 1954 | 1.3 | 1 | 1854 100 |
| 57 | 2671 | 1.3 | 1 | 2550 121 |
| 58 | 1937 | 1.3 | 1 | 1834 103 |
| | 2113 | | 1 | 1993 120 |
| 59 | | 1.3 | | |
| 60 | 2050 | 1.3 | 1 | 1931 119 |
| 61 | 2028 | 1.3 | 1 | 1850 178 |
| 62 | 2082 | 1.3 | 1 | 1825 257 |
| 63 | 2057 | 1.3 | 1 | 1773 284 |
| 64 | 1954 | 1.3 | 1 | 1590 364 |
| | | | | |
| 65 | 2117 | 1.3 | 1 | 1485 632 |
| 66 | 2859 | 1.3 | 1 | 1500 1359 |
| 67 | 18586 | 1.3 | 1 | 1927 16659 |
| 68 | 15630 | 1.3 | 1 | 8000 7630 |
| 69 | 5371 | 1.3 | 1 | 1597 3774 |
| 70 | 2308 | 1.3 | 1 | 424 1884 |
| | | | | |
| 71 | 1421 | 1.3 | 1 | 181 1240 |
| 72 | 769 | 1.3 | 1 | 133 636 |
| 73 | 585 | 1.3 | 1 | 100 485 |
| 74 | 427 | 1.3 | 1 | 85 342 |
| 75 | 319 | 1.3 | 1 | 75 244 |
| 76 | 331 | 1.3 | ī | 91 240 |
| | | | | |
| 77 | 253 | 1.3 | 1 | 70 183 |
| 78 | 214 | 1.3 | 1 | 65 149 |
| 79 | 240 | 1.3 | 1 | 81 159 |
| 80 | 211 | 1.3 | 1 | 67 144 |
| 81 | 240 | 1.3 | 1 | 66 174 |
| 82 | 219 | 1.3 | ī | 79 140 |
| 83 | | | 1 | 49 158 |
| | 207 | 1.3 | | |
| 84 | 186 | 1.3 | 1 | 70 116 |
| 85 | 175 | 1.3 | 1 | 61 114 |
| 86 | 140 | 1.3 | 1 | 53 87 |
| 87 | 145 | 1.3 | 1 | 51 94 |
| 88 | 159 | 1.3 | 1 | 46 113 |
| 89 | | | | |
| | 116 | 1.3 | 1 | 30 86 |
| 90 | 120 | 1.3 | 1 | 43 77 |
| 91 | 137 | 1.3 | 1 | 43 94 |
| 92 | 106 | 1.3 | 1 | 25 81 |
| 93 | 141 | 1.3 | 1 | 37 104 |
| 94 | 115 | 1.3 | 1 | 30 85 |
| | | | | |
| 95 | 128 | 1.3 | 1 | 38 90 |
| 96 | 109 | 1.3 | 1 | 42 67 |
| 97 | 111 | 1.3 | 1 | 20 91 |
| | | | | |

```
98
       77
               1.3
                               15 62
                       1
99
       99
               1.3
                       1
                               30 69
       99
                       1
                               18 81
100
               1.3
                               17 70
101
       87
               1.3
                       1
                               16 57
102
       73
               1.3
                       1
                       1
103
       74
               1.3
                               16 58
104
       110
               1.3
                       1
                               13 97
               1.3
                               9 83
       92
                       1
105
       92
               1.3
                       1
                               7 85
106
       93
               1.3
                       1
                               6 87
107
108
       87
               1.3
                       1
                               5 82
               1.3
                       1
                              2 78
109
       80
       65
               1.3
                       1
                              6 59
110
111
       75
               1.3
                       1
                              2 73
112
       91
               1.3
                       1
                               4 87
113
       76
               1.3
                       1
                              1 75
                       1
114
       79
               1.3
                               2 77
115
       91
               1.3
                      1
                               3 88
               1.3
                       1
                               2 91
116
       93
117
       96
               1.3
                      1
                              1 95
               1.3
                       1
118
       95
                              0 95
                              3 141
119
       144
               1.3
                      1
               1.3
                       1
                              3 128
120
       131
                     1
               1.3
121
       143
                              1 142
                             1 217
               1.3
                      1
122
       218
123
       318
               1.3
                      1
                              2 316
               1.3
                       1
                              1 406
124
       407
125
               1.3
                       1
       790
                               2 788
               1.3
                       1
                               21 7549
126
       7570
```

RUN STATISTICS FOR INPUT FILE: /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/SRR3098746/SRR3098746_2.fastq

85732311 sequences processed in total

The length threshold of paired-end sequences gets evaluated later on (in the validation step)

Validate paired-end files SRR3098746_1_trimmed.fq and SRR3098746_2_trimmed.fq file_1: SRR3098746_1_trimmed.fq, file_2: SRR3098746_2_trimmed.fq

>>>> Now validing the length of the 2 paired-end infiles: SRR3098746_1_trimmed.fq and SRR3098746_2_trimmed.fq <<<< Writing validated paired-end Read 1 reads to SRR3098746_1_val_1.fq Writing validated paired-end Read 2 reads to SRR3098746_2_val_2.fq

Total number of sequences analysed: 85732311

Number of sequence pairs removed because at least one read was shorter than the length cutoff (20 bp): 464084 (0.54%)

Deleting both intermediate output files SRR3098746_1_trimmed.fq and SRR3098746_2_trimmed.fq

stderr

| Program | Return code | Start | Runtime | Version |
|-------------|----------------|----------------------|---------|--|
| trim_galore | 0 | 20-01-22 18:36:39 | 0:13:02 | Quality-/Adapter-/RRBS-/ Speciality-Trimming [powered by Cutadapt] version 0.6.4_dev Last update: 24 09 2019 |

command

fasterq-dump -e 20 -f -t /pylon5/mc5pl7p/usingh/urmi/ pyrpipeTest/testDir/maize -0 /pylon5/mc5pl7p/usingh/urmi/ pyrpipeTest/testDir/maize/SRR3098744 -o SRR3098744.fastq / pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/ SRR3098744/SRR3098744.sra

stdout

spots read : 92,170,823
reads read : 184,341,646
reads written : 184,341,646

stderr

| Program | Return code | Start | Runtime | Version |
|--------------|-------------|-------------------|---------|---------|
| fasterq-dump | 0 | 20-01-22 18:49:41 | 0:01:29 | |

command

trim_galore --cores 10 --paired -o /pylon5/mc5pl7p/usingh/ urmi/pyrpipeTest/testDir/maize/SRR3098744 /pylon5/mc5pl7p/ usingh/urmi/pyrpipeTest/testDir/maize/SRR3098744/ SRR3098744 1.fastg /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/ testDir/maize/SRR3098744/SRR3098744 2.fastq

stdout

Using an excessive number of cores has a diminishing return! It is recommended not to exceed 8 cores per trimming process (you asked for 10 cores). Please consider re-specifying Path to Cutadapt set as: 'cutadapt' (default) Cutadapt seems to be working fine (tested command 'cutadapt --version')

Cutadapt version: 2.6

Cutadapt seems to be using Python 3! Proceeding with multicore enabled Cutadapt using 10 cores

Parallel gzip (pigz) detected. Proceeding with multicore (de)compression using 10 cores

No quality encoding type selected. Assuming that the data provided uses Sanger encoded Phred scores (default)

Output will be written into the directory: /pylon5/mc5pl7p/ usingh/urmi/pyrpipeTest/testDir/maize/SRR3098744/

AUTO-DETECTING ADAPTER TYPE

Attempting to auto-detect adapter type from the first 1 million sequences of the first file (>> /pylon5/mc5pl7p/ usingh/urmi/pyrpipeTest/testDir/maize/SRR3098744/ SRR3098744 1.fastg <<)

Found perfect matches for the following adapter sequences:

Adapter type Count Sequence Sequences

analysed Percentage 9450 AGATCGGAAGAGC Illumina 1000000 0.95 smallRNA TGGAATTCTCGG 1000000 0.00

CTGTCTCTTATA 1000000 0.00 Nextera 0

Using Illumina adapter for trimming (count: 9450). Second best hit was smallRNA (count: 1)

Writing report to '/pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/ testDir/maize/SRR3098744/ SRR3098744 1.fastq trimming report.txt'

SUMMARISING RUN PARAMETERS

Input filename: /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/

testDir/maize/SRR3098744/SRR3098744 1.fastq

Trimming mode: paired-end

Trim Galore version: 0.6.4 dev

Cutadapt version: 2.6

Python version: 3.6.3 :: Intel Corporation

```
Number of cores used for trimming: 10
Quality Phred score cutoff: 20
Quality encoding type selected: ASCII+33
Adapter sequence: 'AGATCGGAAGAGC' (Illumina TruSeg, Sanger
iPCR; auto-detected)
Maximum trimming error rate: 0.1 (default)
Minimum required adapter overlap (stringency): 1 bp
Minimum required sequence length for both reads before a
sequence pair gets removed: 20 bp
Cutadapt seems to be fairly up-to-date (version 2.6).
Setting -i 10
Writing final adapter and quality trimmed output to
SRR3098744 1 trimmed.fg
  >>> Now performing quality (cutoff '-q 20') and adapter
trimming in a single pass for the adapter sequence:
'AGATCGGAAGAGC' from file /pylon5/mc5pl7p/usingh/urmi/
pyrpipeTest/testDir/maize/SRR3098744/SRR3098744 1.fastg <<</pre>
10000000 sequences processed
20000000 sequences processed
30000000 sequences processed
40000000 sequences processed
50000000 sequences processed
60000000 sequences processed
70000000 sequences processed
80000000 sequences processed
90000000 sequences processed
This is cutadapt 2.6 with Python 3.6.3
Command line parameters: -j 10 -e 0.1 -g 20 -0 1 -a
AGATCGGAAGAGC /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/
testDir/maize/SRR3098744/SRR3098744 1.fastq
Processing reads on 10 cores in single-end mode ...
Finished in 214.22 s (2 us/read; 25.82 M reads/minute).
=== Summary ===
                                    92,170,823
Total reads processed:
                                   23,552,072 (25.6%)
Reads with adapters:
Reads written (passing filters): 92,170,823 (100.0%)
Total basepairs processed: 11,613,523,698 bp
Quality-trimmed:
                            106,029,323 bp (0.9%)
Total written (filtered): 11,443,573,255 bp (98.5%)
=== Adapter 1 ===
Sequence: AGATCGGAAGAGC; Type: regular 3'; Length: 13;
Trimmed: 23552072 times.
No. of allowed errors:
```

```
0-9 bp: 0; 10-13 bp: 1
Bases preceding removed adapters:
  A: 27.3%
  C: 31.6%
  G: 22.5%
  T: 18.6%
  none/other: 0.0%
Overview of removed sequences
length
        count
                          max.err error counts
                 expect
1
         14510201
                          23042705.8
                                            0
                                                     14510201
2
         5810228 5760676.4
                                   0
                                            5810228
3
        1241422 1440169.1
                                   0
                                            1241422
4
        432848
                 360042.3
                                   0
                                            432848
5
        134720
                 90010.6 0
                                   134720
6
        93190
                 22502.6 0
                                   93190
7
        89969
                 5625.7
                          0
                                   89969
8
                 1406.4
        65179
                          0
                                   65179
9
        62171
                 351.6
                          0
                                   61148 1023
10
                 87.9
        86505
                          1
                                   84050 2455
11
        36022
                 22.0
                          1
                                   34725 1297
12
                 5.5
                          1
                                   60854 1605
        62459
                          1
13
        63202
                 1.4
                                   61554 1648
                 1.4
                          1
                                   39786 1171
14
        40957
                 1.4
15
        55176
                          1
                                   53743 1433
16
                 1.4
                          1
                                   31838 990
        32828
17
                 1.4
                          1
                                   40901 1192
        42093
                 1.4
                          1
                                   49417 1238
18
        50655
19
        31203
                 1.4
                          1
                                   30339 864
20
                          1
                                   39990 984
                 1.4
        40974
21
        33552
                 1.4
                          1
                                   32773 779
                                   35585 885
22
         36470
                 1.4
                          1
23
                          1
        30988
                 1.4
                                   30308 680
24
                 1.4
                          1
                                   26962 680
         27642
25
                          1
        37290
                 1.4
                                   36635 655
26
         14824
                 1.4
                          1
                                   14488 336
27
                 1.4
                          1
                                   25730 539
         26269
28
                 1.4
                          1
                                   28008 524
         28532
29
                 1.4
                          1
                                   18652 385
        19037
                                   21708 359
30
                 1.4
                          1
         22067
31
                 1.4
                          1
                                   18153 367
        18520
                                   23417 407
32
                 1.4
                          1
         23824
33
        10400
                 1.4
                          1
                                   10167 233
                                   15111 321
34
                 1.4
                          1
        15432
35
                 1.4
                          1
                                   19967 283
         20250
36
                          1
                                   5903 171
        6074
                 1.4
37
        16645
                 1.4
                          1
                                   16412 233
38
        6575
                 1.4
                          1
                                   6426 149
39
                          1
        11146
                 1.4
                                   10954 192
40
         11345
                 1.4
                          1
                                   11103 242
41
        8966
                 1.4
                          1
                                   8790 176
```

| 42 | 7025 | 1.4 | 1 | 6910 115 |
|----------|-------|-------|---|-----------|
| 43 | 11531 | 1.4 | 1 | 11374 157 |
| 44 | 3758 | 1.4 | 1 | 3642 116 |
| | | | | |
| 45 | 5037 | 1.4 | 1 | 4938 99 |
| 46 | 3420 | 1.4 | 1 | 3313 107 |
| 47 | 5164 | 1.4 | 1 | 5048 116 |
| 48 | 4451 | 1.4 | 1 | 4323 128 |
| 49 | 5231 | 1.4 | 1 | 5086 145 |
| 50 | 3799 | 1.4 | 1 | 3681 118 |
| | | | | |
| 51 | 4087 | 1.4 | 1 | 3975 112 |
| 52 | 3088 | 1.4 | 1 | 3010 78 |
| 53 | 3464 | 1.4 | 1 | 3368 96 |
| 54 | 3185 | 1.4 | 1 | 3069 116 |
| 55 | 3689 | 1.4 | 1 | 3579 110 |
| 56 | 1309 | 1.4 | 1 | 1240 69 |
| 57 | 2588 | 1.4 | 1 | 2505 83 |
| 57 58 | | | | |
| | 2160 | 1.4 | 1 | 2094 66 |
| 59 | 1631 | 1.4 | 1 | 1579 52 |
| 60 | 2373 | 1.4 | 1 | 2322 51 |
| 61 | 1459 | 1.4 | 1 | 1400 59 |
| 62 | 1354 | 1.4 | 1 | 1296 58 |
| 63 | 1915 | 1.4 | 1 | 1856 59 |
| 64 | 1438 | 1.4 | 1 | 1389 49 |
| | | | | |
| 65 | 1087 | 1.4 | 1 | 1025 62 |
| 66 | 1293 | 1.4 | 1 | 1230 63 |
| 67 | 1077 | 1.4 | 1 | 1017 60 |
| 68 | 1056 | 1.4 | 1 | 995 61 |
| 69 | 1143 | 1.4 | 1 | 1051 92 |
| 70 | 1093 | 1.4 | 1 | 961 132 |
| 71 | 1013 | 1.4 | 1 | 872 141 |
| 72 | 1119 | 1.4 | 1 | 865 254 |
| | | | | |
| 73 | 1256 | 1.4 | 1 | 863 393 |
| 74 | 1852 | 1.4 | 1 | 951 901 |
| 75 | 9184 | 1.4 | 1 | 1105 8079 |
| 76 | 8395 | 1.4 | 1 | 3093 5302 |
| 77 | 5164 | 1.4 | 1 | 1773 3391 |
| 78 | 3653 | 1.4 | 1 | 767 2886 |
| 79 | 2559 | 1.4 | 1 | 476 2083 |
| 80 | 1380 | 1.4 | 1 | 297 1083 |
| | | | | |
| 81 | 869 | 1.4 | 1 | 236 633 |
| 82 | 627 | 1.4 | 1 | 179 448 |
| 83 | 368 | 1.4 | 1 | 127 241 |
| 84 | 349 | 1.4 | 1 | 128 221 |
| 85 | 301 | 1.4 | 1 | 112 189 |
| 86 | 308 | 1.4 | 1 | 109 199 |
| 87 | 236 | 1.4 | 1 | 77 159 |
| | | | | |
| 88 | 224 | 1.4 | 1 | 76 148 |
| 89 | 180 | 1.4 | 1 | 65 115 |
| 90 | 202 | 1.4 | 1 | 67 135 |
| 91 | 175 | 1.4 | 1 | 47 128 |
| 92 | 204 | 1.4 | 1 | 68 136 |
| 93 | 152 | 1.4 | 1 | 55 97 |
| 33 | 192 | ± 1 1 | _ | 55 57 |

| 94 | 158 | 1.4 | 1 | 60 98 |
|-----|------|-----|---|----------|
| 95 | 183 | 1.4 | 1 | 51 132 |
| 96 | 159 | 1.4 | 1 | 36 123 |
| 97 | 145 | 1.4 | 1 | 41 104 |
| 98 | 148 | 1.4 | 1 | 35 113 |
| 99 | 111 | 1.4 | 1 | 35 76 |
| 100 | 122 | 1.4 | 1 | 28 94 |
| 101 | 138 | 1.4 | 1 | 35 103 |
| 102 | 162 | 1.4 | 1 | 37 125 |
| 103 | 124 | 1.4 | 1 | 21 103 |
| 104 | 130 | 1.4 | 1 | 32 98 |
| 105 | 85 | 1.4 | 1 | 18 67 |
| 106 | 130 | 1.4 | 1 | 36 94 |
| 107 | 143 | 1.4 | 1 | 23 120 |
| 108 | 106 | 1.4 | 1 | 21 85 |
| 109 | 91 | 1.4 | 1 | 20 71 |
| 110 | 128 | 1.4 | 1 | 24 104 |
| 111 | 107 | 1.4 | 1 | 22 85 |
| 112 | 93 | 1.4 | 1 | 18 75 |
| 113 | 114 | 1.4 | 1 | 23 91 |
| 114 | 105 | 1.4 | 1 | 18 87 |
| 115 | 127 | 1.4 | 1 | 21 106 |
| 116 | 127 | 1.4 | 1 | 21 106 |
| 117 | 113 | 1.4 | 1 | 16 97 |
| 118 | 127 | 1.4 | 1 | 14 113 |
| 119 | 137 | 1.4 | 1 | 7 130 |
| 120 | 139 | 1.4 | 1 | 7 132 |
| 121 | 186 | 1.4 | 1 | 17 169 |
| 122 | 220 | 1.4 | 1 | 14 206 |
| 123 | 378 | 1.4 | 1 | 22 356 |
| 124 | 494 | 1.4 | 1 | 16 478 |
| 125 | 1054 | 1.4 | 1 | 42 1012 |
| 126 | 8763 | 1.4 | 1 | 167 8596 |
| | | | | |

RUN STATISTICS FOR INPUT FILE: /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/SRR3098744/SRR3098744_1.fastq

92170823 sequences processed in total

The length threshold of paired-end sequences gets evaluated later on (in the validation step)

Writing report to '/pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/
testDir/maize/SRR3098744/
SRR3098744 2.fastq trimming report.txt'

SUMMARISING RUN PARAMETERS

Input filename: /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/

testDir/maize/SRR3098744/SRR3098744_2.fastq

Trimming mode: paired-end

Trim Galore version: 0.6.4 dev

Cutadapt version: 2.6

```
Python version: 3.6.3 :: Intel Corporation
Number of cores used for trimming: 10
Quality Phred score cutoff: 20
Ouality encoding type selected: ASCII+33
Adapter sequence: 'AGATCGGAAGAGC' (Illumina TruSeg, Sanger
iPCR; auto-detected)
Maximum trimming error rate: 0.1 (default)
Minimum required adapter overlap (stringency): 1 bp
Minimum required sequence length for both reads before a
sequence pair gets removed: 20 bp
Cutadapt seems to be fairly up-to-date (version 2.6).
Setting -j -j 10
Writing final adapter and quality trimmed output to
SRR3098744 2 trimmed.fq
 >>> Now performing quality (cutoff '-q 20') and adapter
trimming in a single pass for the adapter sequence:
'AGATCGGAAGAGC' from file /pylon5/mc5pl7p/usingh/urmi/
pyrpipeTest/testDir/maize/SRR3098744/SRR3098744 2.fastg <<</pre>
10000000 sequences processed
20000000 sequences processed
30000000 sequences processed
40000000 sequences processed
50000000 sequences processed
60000000 sequences processed
70000000 sequences processed
80000000 sequences processed
90000000 sequences processed
This is cutadapt 2.6 with Python 3.6.3
Command line parameters: -j 10 -e 0.1 -q 20 -0 1 -a
AGATCGGAAGAGC /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/
testDir/maize/SRR3098744/SRR3098744 2.fastq
Processing reads on 10 cores in single-end mode ...
Finished in 214.07 s (2 us/read; 25.83 M reads/minute).
=== Summary ===
Total reads processed:
                                    92,170,823
                                    22,417,052 (24.3%)
Reads with adapters:
Reads written (passing filters): 92,170,823 (100.0%)
Total basepairs processed: 11,613,523,698 bp
Quality-trimmed:
                           186,415,642 bp (1.6%)
Total written (filtered): 11,364,862,692 bp (97.9%)
=== Adapter 1 ===
Sequence: AGATCGGAAGAGC; Type: regular 3'; Length: 13;
Trimmed: 22417052 times.
```

```
No. of allowed errors:
0-9 bp: 0; 10-13 bp: 1
Bases preceding removed adapters:
  A: 31.4%
  C: 24.6%
  G: 28.3%
  T: 15.7%
  none/other: 0.0%
Overview of removed sequences
length
         count
                  expect
                           max.err error counts
                           23042705.8
                                                      12169032
         12169032
1
                                             0
2
         7535213 5760676.4
                                             7535213
                                    0
3
         831524
                  1440169.1
                                    0
                                             831524
4
         291075
                  360042.3
                                    0
                                             291075
5
         171719
                  90010.6 0
                                    171719
6
         105099
                  22502.6 0
                                    105099
7
         137323
                  5625.7
                           0
                                    137323
8
         55681
                  1406.4
                           0
                                    55681
9
                                    23611 1729
         25340
                  351.6
                           0
10
         113308
                  87.9
                           1
                                    108103 5205
                                    6216 3675
11
                  22.0
         9891
                           1
12
         82903
                  5.5
                           1
                                    79400 3503
                  1.4
                           1
                                    23479 1606
13
         25085
                  1.4
14
         91895
                           1
                                    88301 3594
15
         22230
                  1.4
                           1
                                    21080 1150
                  1.4
                           1
16
         29592
                                    28217 1375
                                    78817 2789
17
                  1.4
                           1
         81606
18
         6254
                  1.4
                           1
                                    5606 648
                           1
19
                  1.4
                                    63462 1984
         65446
20
                  1.4
                           1
                                    33813 1101
         34914
21
                  1.4
                           1
                                    2540 369
         2909
                           1
22
                  1.4
                                    33619 1298
         34917
23
                                    31581 1315
                  1.4
                           1
         32896
24
         63855
                  1.4
                           1
                                    61709 2146
25
         14579
                  1.4
                           1
                                    13937 642
26
                  1.4
                           1
         22214
                                    21481 733
27
                  1.4
                           1
                                    6821 480
         7301
28
                  1.4
                           1
         40437
                                    39289 1148
29
                  1.4
                           1
                                    1807 301
         2108
30
                  1.4
                           1
         36408
                                    35355 1053
31
                  1.4
                           1
                                    3641 299
         3940
32
         23660
                  1.4
                           1
                                    22955 705
                                    17518 564
33
                  1.4
                           1
         18082
34
                  1.4
                           1
         5631
                                    5319 312
35
                           1
         21464
                  1.4
                                    20815 649
36
         6259
                  1.4
                           1
                                    5910 349
                           1
37
         11647
                  1.4
                                    11221 426
                           1
38
         14175
                  1.4
                                    13738 437
39
         7493
                  1.4
                           1
                                    7201 292
                           1
40
         8248
                  1.4
                                    7853 395
```

| 41 | 9166 | 1.4 | 1 | 8853 313 |
|----------|-------|-----|---|------------|
| 42 | 12958 | 1.4 | 1 | 12603 355 |
| 43 | | | 1 | 1164 137 |
| | 1301 | 1.4 | | |
| 44 | 6602 | 1.4 | 1 | 6381 221 |
| 45 | 10196 | 1.4 | 1 | 9883 313 |
| 46 | 3629 | 1.4 | 1 | 3457 172 |
| 47 | 2815 | 1.4 | 1 | 2639 176 |
| | | | | |
| 48 | 5270 | 1.4 | 1 | 5094 176 |
| 49 | 4281 | 1.4 | 1 | 4123 158 |
| 50 | 3466 | 1.4 | 1 | 3303 163 |
| 51 | 7116 | 1.4 | 1 | 6898 218 |
| 52 | 3000 | 1.4 | 1 | 2855 145 |
| 53 | 1973 | 1.4 | 1 | 1853 120 |
| 54 | | | 1 | 1565 113 |
| | 1678 | 1.4 | | |
| 55 | 3011 | 1.4 | 1 | 2849 162 |
| 56 | 2072 | 1.4 | 1 | 1941 131 |
| 57 | 2244 | 1.4 | 1 | 2111 133 |
| 58 | 2080 | 1.4 | 1 | 1957 123 |
| 59 | 1886 | 1.4 | 1 | 1772 114 |
| | | | 1 | 1857 127 |
| 60 | 1984 | 1.4 | | |
| 61 | 1916 | 1.4 | 1 | 1726 190 |
| 62 | 1911 | 1.4 | 1 | 1715 196 |
| 63 | 1852 | 1.4 | 1 | 1613 239 |
| 64 | 1765 | 1.4 | 1 | 1486 279 |
| 65 | 1963 | 1.4 | 1 | 1486 477 |
| 66 | 2473 | | 1 | 1479 994 |
| | | 1.4 | | |
| 67 | 14715 | 1.4 | 1 | 1735 12980 |
| 68 | 14201 | 1.4 | 1 | 7932 6269 |
| 69 | 4906 | 1.4 | 1 | 1771 3135 |
| 70 | 2119 | 1.4 | 1 | 516 1603 |
| 71 | 1234 | 1.4 | 1 | 201 1033 |
| 72 | 737 | 1.4 | 1 | 182 555 |
| | | | | |
| 73 | 599 | 1.4 | 1 | 125 474 |
| 74 | 423 | 1.4 | 1 | 117 306 |
| 75 | 326 | 1.4 | 1 | 97 229 |
| 76 | 333 | 1.4 | 1 | 114 219 |
| 77 | 254 | 1.4 | 1 | 83 171 |
| 78 | 238 | 1.4 | 1 | 88 150 |
| 70 79 | 249 | 1.4 | 1 | 86 163 |
| | | | | |
| 80 | 213 | 1.4 | 1 | 71 142 |
| 81 | 235 | 1.4 | 1 | 75 160 |
| 82 | 215 | 1.4 | 1 | 91 124 |
| 83 | 221 | 1.4 | 1 | 67 154 |
| 84 | 191 | 1.4 | 1 | 78 113 |
| 85 | 202 | 1.4 | 1 | 67 135 |
| | | | | |
| 86 | 176 | 1.4 | 1 | 70 106 |
| 87 | 156 | 1.4 | 1 | 58 98 |
| 88 | 184 | 1.4 | 1 | 51 133 |
| 89 | 157 | 1.4 | 1 | 51 106 |
| 90 | 166 | 1.4 | 1 | 36 130 |
| 91 | 138 | | 1 | 36 102 |
| | | 1.4 | | |
| 92 | 130 | 1.4 | 1 | 42 88 |
| | | | | |

```
1.4
93
        158
                          1
                                   41 117
94
        160
                 1.4
                          1
                                   53 107
95
                          1
                                   44 87
        131
                 1.4
                                   20 100
96
        120
                 1.4
                          1
                          1
                                  29 125
97
        154
                 1.4
                                   27 64
98
                          1
        91
                 1.4
99
        109
                 1.4
                          1
                                   22 87
                          1
                                  25 88
100
        113
                 1.4
                          1
                                   17 80
101
        97
                 1.4
                 1.4
                          1
                                   20 80
102
        100
103
        107
                 1.4
                          1
                                   13 94
                 1.4
                          1
                                  22 103
104
        125
                 1.4
                          1
                                  8 93
105
        101
106
        91
                 1.4
                          1
                                   10 81
107
        110
                 1.4
                          1
                                   10 100
108
        132
                 1.4
                          1
                                  11 121
                          1
109
        120
                 1.4
                                   10 110
110
        88
                 1.4
                          1
                                  4 84
                                  6 85
                          1
111
        91
                 1.4
112
        99
                 1.4
                          1
                                  4 95
                          1
                                  9 82
113
        91
                 1.4
                 1.4
114
        76
                          1
                                  3 73
                 1.4
                          1
                                  5 111
115
        116
                 1.4
                          1
                                  5 105
116
        110
                 1.4
                          1
                                  3 121
117
        124
118
        123
                 1.4
                          1
                                  4 119
        160
                 1.4
                          1
                                  5 155
119
                 1.4
                          1
120
        166
                                  4 162
                 1.4
                          1
                                  1 181
121
        182
                          1
122
        256
                 1.4
                                  9 247
        347
                          1
123
                 1.4
                                  9 338
                          1
                                  5 411
124
        416
                 1.4
125
                 1.4
                          1
                                  3 912
        915
126
                          1
                 1.4
                                  29 6965
        6994
```

RUN STATISTICS FOR INPUT FILE: /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/SRR3098744/SRR3098744_2.fastq

92170823 sequences processed in total The length threshold of paired-end sequences gets evaluated later on (in the validation step)

Validate paired-end files SRR3098744_1_trimmed.fq and SRR3098744_2_trimmed.fq file_1: SRR3098744_1_trimmed.fq, file_2: SRR3098744 2 trimmed.fq

>>>> Now validing the length of the 2 paired-end infiles: SRR3098744_1_trimmed.fq and SRR3098744_2_trimmed.fq <<<< Writing validated paired-end Read 1 reads to SRR3098744_1_val_1.fq

```
Writing validated paired-end Read 2 reads to SRR3098744_2_val_2.fq

Total number of sequences analysed: 92170823
```

Number of sequence pairs removed because at least one read was shorter than the length cutoff (20 bp): 469354 (0.51%)

Deleting both intermediate output files SRR3098744_1_trimmed.fq and SRR3098744_2_trimmed.fq

stderr

| Program | Return code | Start | Runtime | Version |
|-------------|----------------|----------------------|---------|--|
| trim_galore | 0 | 20-01-22 18:51:10 | 0:13:56 | Quality-/Adapter-/RRBS-/ Speciality-Trimming [powered by Cutadapt] version 0.6.4_dev Last update: 24 09 2019 |

command

STAR --outFilterType BySJout --runThreadN 8 --outSAMtype BAM SortedByCoordinate --genomeDir /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/maize_data/starindex --readFilesIn /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/SRR3098746/SRR3098746_1_trimgalore.fastq /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/SRR3098746/SRR3098746_2_trimgalore.fastq --outFileNamePrefix /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/SRR3098746/

stdout

```
Jan 22 19:05:07 ..... started STAR run

Jan 22 19:05:07 ..... loading genome

Jan 22 19:05:40 ..... started mapping

Jan 22 20:47:54 ..... finished mapping

Jan 22 20:47:57 ..... started sorting BAM

Jan 22 20:52:21 ..... finished successfully
```

| Program | Return code | Start | Runtime | Version |
|---------|-------------|-------------------|---------|---------|
| STAR | 0 | 20-01-22 19:05:07 | 1:47:28 | 2.7.3a |

stringtie -G maize_data/Zea_mays.B73_RefGen_v4.46.gtf -p 25 o /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/
SRR3098746/Aligned.sortedByCoord.out_stringtie.gtf /pylon5/
mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/SRR3098746/
Aligned.sortedByCoord.out.bam

stdout

stderr

| Program | Return code | Start | Runtime | Version |
|-----------|-------------|-------------------|---------|---------|
| stringtie | 0 | 20-01-22 20:52:36 | 0:20:09 | 2.0.3 |

command

STAR --outFilterType BySJout --runThreadN 8 --outSAMtype BAM SortedByCoordinate --genomeDir /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/maize_data/starindex -- readFilesIn /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/SRR3098744/SRR3098744_1_trimgalore.fastq /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/SRR3098744/SRR3098744_2_trimgalore.fastq --outFileNamePrefix /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/SRR3098744/

stdout

| Jan | 22 | 21:12:45 | started STAR run |
|-----|----|----------|---------------------------|
| Jan | 22 | 21:12:45 | loading genome |
| Jan | 22 | 21:13:25 | started mapping |
| Jan | 22 | 23:01:59 | finished mapping |
| Jan | 22 | 23:02:01 | started sorting BAM |
| Jan | 22 | 23:06:09 | finished successfully |

| Program | Return code | Start | Runtime | Version |
|---------|-------------|-------------------|---------|---------|
| STAR | 0 | 20-01-22 21:12:45 | 1:53:37 | 2.7.3a |

stringtie -G maize_data/Zea_mays.B73_RefGen_v4.46.gtf -p 25 -o /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/SRR3098744/Aligned.sortedByCoord.out_stringtie.gtf /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/SRR3098744/Aligned.sortedByCoord.out.bam

stdout

stderr

| Program | Return code | Start | Runtime | Version |
|-----------|-------------|-------------------|---------|---------|
| stringtie | 0 | 20-01-22 23:06:22 | 0:19:58 | 2.0.3 |

command

gffread -w /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/
maize/SRR3098746/transcripts.fa -g maize_data/
Zea_mays.B73_RefGen_v4.dna.toplevel.1_10.fa /pylon5/mc5pl7p/
usingh/urmi/pyrpipeTest/testDir/maize/SRR3098746/
Aligned.sortedByCoord.out stringtie.gtf

stdout

stderr

| Program | Return code | Start | Runtime | Version |
|---------|-------------|-------------------|---------|---------|
| gffread | 0 | 20-01-22 23:27:18 | 0:00:09 | 0.11.5 |

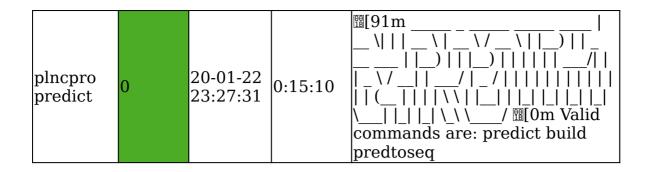
command

plncpro predict -i /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/SRR3098746/transcripts_filter.fa -o /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/SRR3098746/plncpro_out -p plncpro_predictions -t 25 -d uniprot/uniprotdb -m monocot model/monocot.model -v -r

stdout

| | | / / |
|--|--|----------------|

| Program Return code Start | Runtime Version |
|---------------------------|-----------------|
|---------------------------|-----------------|



gffread -w /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/
maize/SRR3098744/transcripts.fa -g maize_data/
Zea_mays.B73_RefGen_v4.dna.toplevel.1_10.fa /pylon5/mc5pl7p/
usingh/urmi/pyrpipeTest/testDir/maize/SRR3098744/
Aligned.sortedByCoord.out stringtie.gtf

stdout

stderr

| Program | Return code | Start | Runtime | Version |
|---------|-------------|-------------------|---------|---------|
| gffread | 0 | 20-01-22 23:42:41 | 0:00:07 | 0.11.5 |

command

plncpro predict -i /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/SRR3098744/transcripts_filter.fa -o /pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize/SRR3098744/plncpro_out -p plncpro_predictions -t 25 -d uniprot/uniprotdb -m monocot model/monocot.model -v -r

stdout

| 11 [91m] | | 0.2835595776 0.7164404223 | |
|-----------------|--|------------------------------|---------|
| \ | | _ \ | I /I |



stderr

| Program | Return code | Start | Runtime | Version |
|--------------------|----------------|----------------------|---------|---------|
| plncpro predict | 0 | 20-01-22 23:42:49 | 0:13:35 | M[91m |

Environment Information

| Programs | | |
|--------------------|--|--|
| name | version | path |
| stringtie | 2.0.3 | /pylon5/mc5pl7p/usingh/lib/ stringtie/ stringtie-2.0.3.Linux_x86_64/ stringtie |
| prefetch | /pylon5/mc5pl7p/usingh/ lib/sratoolkit.2.10.0- centos_linux64/bin/ prefetch : 2.10.0 | /pylon5/mc5pl7p/usingh/lib/ sratoolkit.2.10.0- centos_linux64/bin/prefetch |
| fasterq- dump | | /pylon5/mc5pl7p/usingh/lib/ sratoolkit.2.10.0- centos_linux64/bin/fasterq- dump |
| STAR | 2.7.3a | /pylon5/mc5pl7p/usingh/lib/ STAR-2.7.3a/bin/Linux_x86_64/ STAR |
| plncpro predict | Im[91m | /pylon5/mc5pl7p/usingh/lib/ myAnacondaInstallation/envs/ pyrpipeTest/bin/plncpro |
| trim_galore | Quality-/Adapter-/RRBS-/ Speciality-Trimming [powered by Cutadapt] version 0.6.4_dev Last update: 24 09 2019 | /pylon5/mc5pl7p/usingh/lib/ TrimGalore-0.6.5/trim_galore |
| gffread | 0.11.5 | /pylon5/mc5pl7p/usingh/lib/ gffread/gffread |

| System Inform | nation |
|--------------------|---|
| Time at collection | 20-01-22 18:14:47 |
| Python | Python 3.7.5 (default, Oct 25 2019, 15:51:11) [GCC 7.3.0] |
| Operating system | Linux-3.10.0-957.27.2.el7.x86_64-x86_64-with- centos-7.6.1810-Core |
| CPU | 28 logical CPU cores |

| sys.modules | |
|---------------------|--|
| 'sys' | |
| 'builtins' | |
| '_frozen_importlib' | |

| '_imp' |
|------------------------------|
| '_thread' |
| '_warnings' |
| ' weakref' |
| 'zipimport' |
| '_frozen_importlib_external' |
| 'io' |
| - 'marshal' |
| 'posix' |
| 'encodings' |
| 'codecs' |
| ' codecs' |
| 'encodings.aliases' |
| 'encodings.utf_8' |
| ' signal' |
| ' main ' |
| |
| 'encodings.latin_1' 'io' |
| |
| 'abc' |
| '_abc' |
| '_bootlocale' |
| '_locale' |
| 'site' |
| 'os' |
| 'stat' |
| '_stat' |
| 'posixpath' |
| 'genericpath' |
| 'os.path' |
| '_collections_abc' |
| '_sitebuiltins' |
| 'pyrpipe' |
| 'pyrpipe.sra' |
| 'pyrpipe.pyrpipe_utils' |
| 'datetime' |
| 'time' |
| 'math' |
| ' datetime' |
| 'pyrpipe.pyrpipe_engine' |
| 'subprocess' |
| 'signal' |
| 'functools' |
| ' functools' |
| 'collections' |
| COHECHOHS |

| 'operator' |
|-----------------------------|
| '_operator' |
| 'keyword' |
| 'heapq' |
| '_heapq' |
| 'itertools' |
| 'reprlib' |
| ' collections' |
| 'enum' |
| 'types' |
| 'warnings' |
| 'errno' |
| ' posixsubprocess' |
| 'select' |
| 'selectors' |
| |
| 'collections.abc' |
| 'threading' |
| 'traceback' |
| 'linecache' |
| 'tokenize' |
| 're' |
| 'sre_compile' |
| '_sre' |
| 'sre_parse' |
| 'sre_constants' |
| 'copyreg' |
| 'token' |
| ' weakrefset' |
| 'logging' |
| 'weakref' |
| 'string' |
| ' string' |
| 'atexit' |
| 'platform' |
| 'multiprocessing' |
| 'multiprocessing.context' |
| 'multiprocessing.process' |
| 'multiprocessing.reduction' |
| 'pickle' |
| 'struct' |
| ' struct' |
| _ _ |
| '_compat_pickle' |
| '_pickle' |
| 'socket' |

| '_socket' |
|----------------|
| 'array' |
| 'mp_main' |
| 'json' |
| 'json.decoder' |
| 'json.scanner' |
| '_json' |
| 'json.encoder' |

sys.path

'/pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/testDir/maize'

'/pylon5/mc5pl7p/usingh/lib/myAnacondaInstallation/envs/pyrpipeTest/lib/python37.zip'

'/pylon5/mc5pl7p/usingh/lib/myAnacondaInstallation/envs/pyrpipeTest/lib/python3.7'

'/pylon5/mc5pl7p/usingh/lib/myAnacondaInstallation/envs/pyrpipeTest/lib/python3.7/lib-dynload'

'/pylon5/mc5pl7p/usingh/lib/myAnacondaInstallation/envs/pyrpipeTest/lib/python3.7/site-packages'

'/pylon5/mc5pl7p/usingh/urmi/pyrpipeTest/pyrpipe'