RNA-Seq Analysis (Spring 2018)

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Instructors: Jessica Holmes, Jenny Drnevich (HPCBio)

Location: 607 IGB

Times: 9am - 5pm; 12-1pm there will be a break for lunch.

March 19

PowerPoint Slides (in order):

1. Workshop overview
2. Expression technologies, experimental design and reproducible research
3. RNA-Seq intro, linux review, FASTQC
4. Sample tracking
5. Trimming

Additional materials:

- Sample Sequencing Report
- SampleInfo_0.xlsx
- Linux / R Comparison

Video Recordings:

- 9am - 1pm: HERE
- 1pm - 5pm: HERE

March 20

PowerPoint Slides (in order):

1. Alignment, IGV, & Gene Counting
2. Read fates - updated

Additional materials:

- check_gff_interactiveR.R
- Targets0.txt

Video Recordings:

- 9am - 1pm: HERE
- 1pm - 5pm: HERE

March 21

PowerPoint Slides (in order):

1. Gene count QC & Normalization
2. Statistical Analysis

Additional materials:

- maseq_sp18.zip
Video Recordings:
- 9am - 1pm: HERE
- 1pm - 5pm: HERE

March 22

PowerPoint Slides (in order):
1. Venn Diagrams
2. Heatmaps
3. Annotation & Over-representation testing

Additional materials:
- Extra_22mar18.zip
- Heatmaps_22mar18.R

Video Recordings:
- 9am - 1pm: HERE
- 1pm - 5pm: HERE