



RNA Seq Differential Gene Expression Analysis

Analysis for Walker lab

- **Prepared for:**
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 - **Process Executed on :** Feb-29-2024
 - **Input Data:** genes_expression_expected_count.tsv
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DESeq2 Results

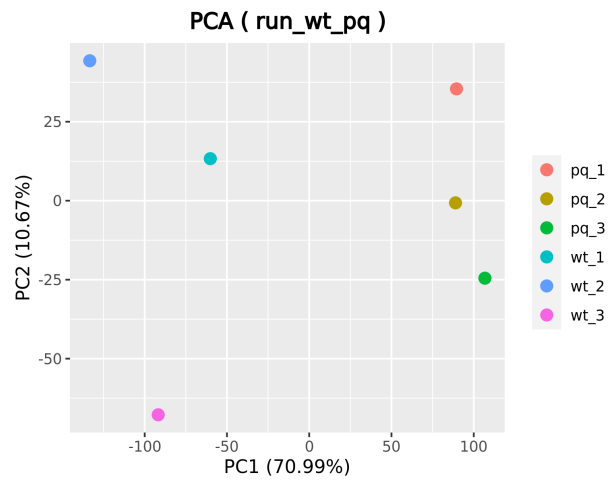
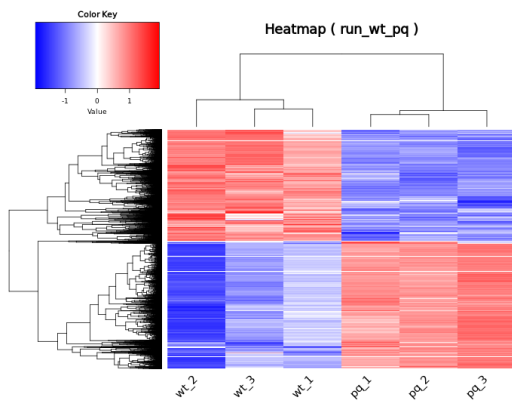
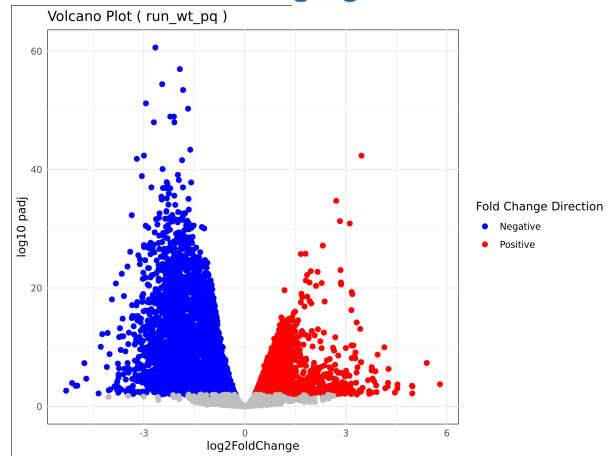
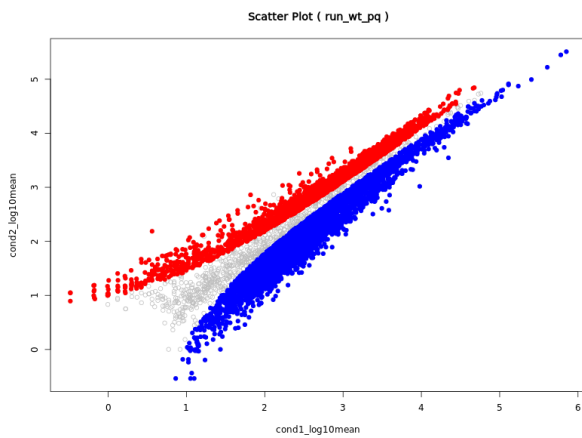
Experiment run_wt_pq

Top 10 UP for run_wt_pq			
Wormbase_Id	Sequence_id	Gene_name	log2FoldChange
WBGene00008396	D1086.9	nan	5.7952
WBGene00001075	H27M09.4	dpy-14	5.4031
WBGene00001828	F40E10.1	hch-1	4.9775
WBGene00044376	Y49F6B.12	nan	4.9715
WBGene00219546	F41E7.20	nan	4.9670
WBGene00000738	F14H12.1	col-165	4.5335
WBGene00017052	D2024.4	nan	4.5281
WBGene00012065	T26H2.3	fbxb-2	4.4571
WBGene00007246	C01G12.6	nspp-10	4.2671
WBGene00012604	Y38E10A.26	nspe-2	4.2532

Top 10 DOWN for run_wt_pq			
Wormbase_Id	Sequence_id	Gene_name	log2FoldChange
WBGene00044430	T23F4.5	nan	-5.3077
WBGene00020539	T16D1.1	nan	-5.1317
WBGene00003708	F13A2.8	nhr-118	-5.0230
WBGene00044441	Y119C1B.11	nan	-4.9752
WBGene00014777	F58A4.12	nan	-4.7664
WBGene00014861	Y6B3B.2	nan	-4.7095
WBGene00219318	R08A2.9	nan	-4.3448
WBGene00044292	F56D6.8	nan	-4.2790
WBGene00077750	W01B6.11	nan	-4.2343
WBGene00019529	K08D10.5	nan	-4.0997



RNA Seq Analysis

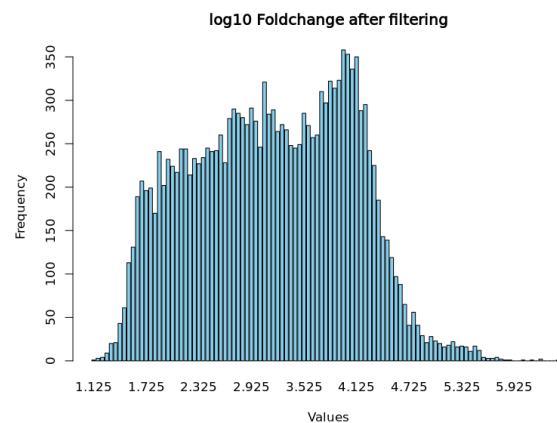
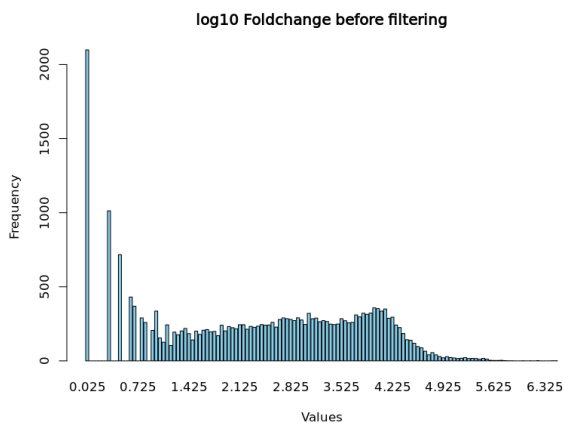




DESeq2 Data Preparation

Low Count Filtering

- **Criteria:** Filter features where MAX Value < 10



Low Count Filter

lib-name	Before	After
pq_1	22,511,432	22,503,057
pq_2	28,995,845	28,986,489
pq_3	25,494,187	25,486,213
wt_1	26,556,463	26,547,718
wt_2	24,941,206	24,931,733
wt_3	25,823,121	25,814,185