



RNA Seq Differential Gene Expression Analysis

Analysis for Francis lab

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 - **Process Executed on :** Nov-16-2023
 - **Input Data:** genes_expression_expected_count.tsv
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DESeq2 Results

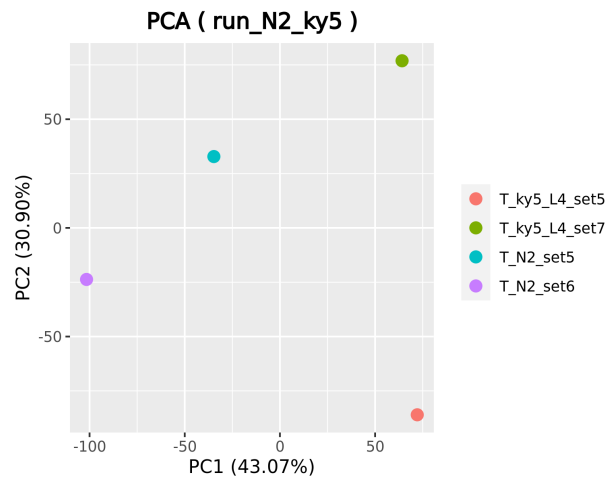
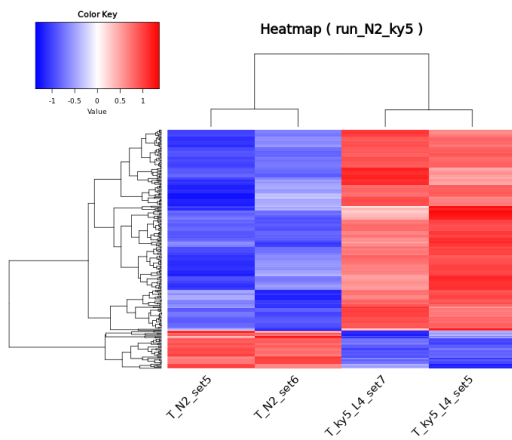
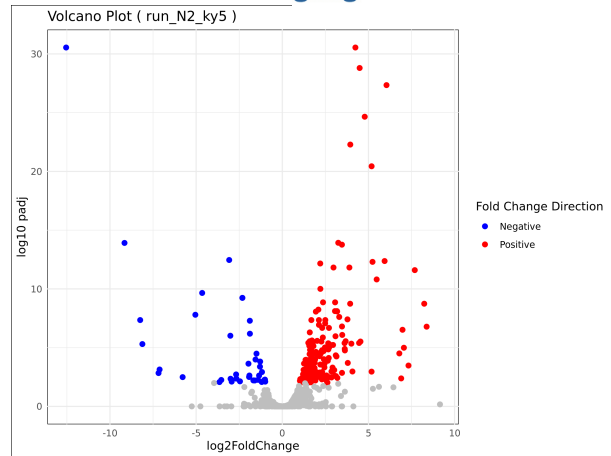
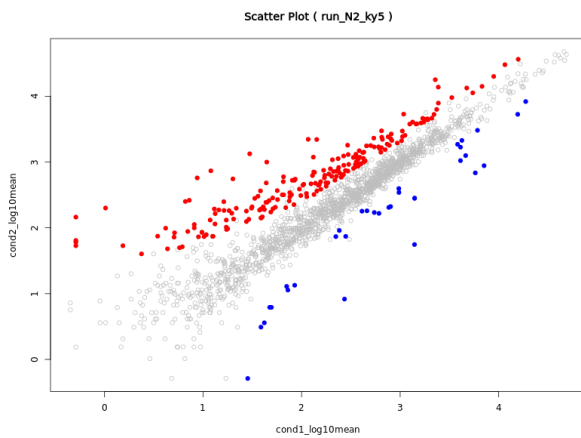
Experiment run_N2_ky5

Top 10 UP for run_N2_ky5			
Wormbase_Id	Sequence_id	Gene_name	log2FoldChange
WBGene00002015	T27E4.8	hsp-16.1	8.3782
WBGene00018619	F48G7.8	nan	8.2392
WBGene00014047	ZK666.7	cllec-61	7.6906
WBGene00018527	F47B3.3	nan	7.3259
WBGene00011674	T10B9.4	cyp-13A8	7.0591
WBGene00009857	F49A5.5	cllec-28	6.9792
WBGene00019623	K10C9.1	nan	6.9023
WBGene00021580	Y46C8AL.2	cllec-174	6.7939
WBGene00016670	C45G7.3	ilys-3	6.0499
WBGene00014046	ZK666.6	cllec-60	5.9399

Top 10 DOWN for run_N2_ky5			
Wormbase_Id	Sequence_id	Gene_name	log2FoldChange
WBGene00004994	T25C12.2	spp-9	-12.5449
WBGene00018911	F56A4.3	nan	-9.1567
WBGene00235356	Y67D8A.10	nan	-8.2468
WBGene00249808	Y48G8AL.20	nan	-8.1195
WBGene00018601	F48C1.9	nan	-7.1819
WBGene00018918	F56A4.10	nan	-7.1207
WBGene00008911	F17C8.6	nan	-5.7830
WBGene00004997	T22G5.7	spp-12	-5.0448
WBGene00001387	F15B9.1	far-3	-4.6489
WBGene00304815	Y40A1A.6	nan	-3.6454



RNA Seq Analysis

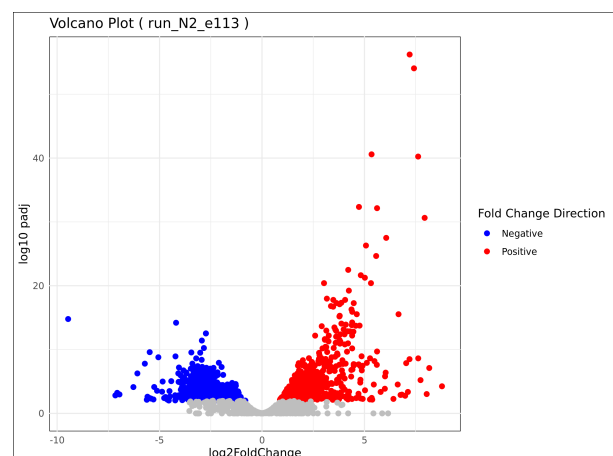
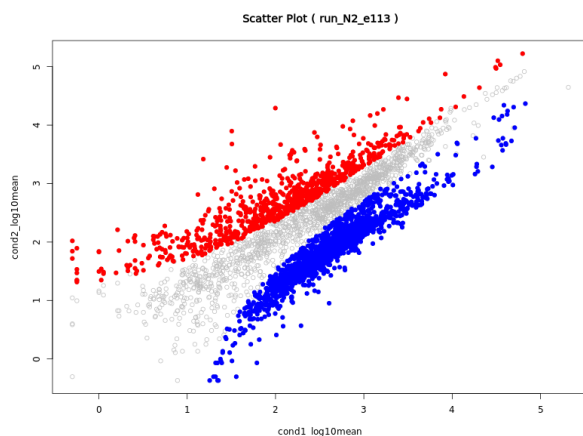




Experiment run_N2_e113

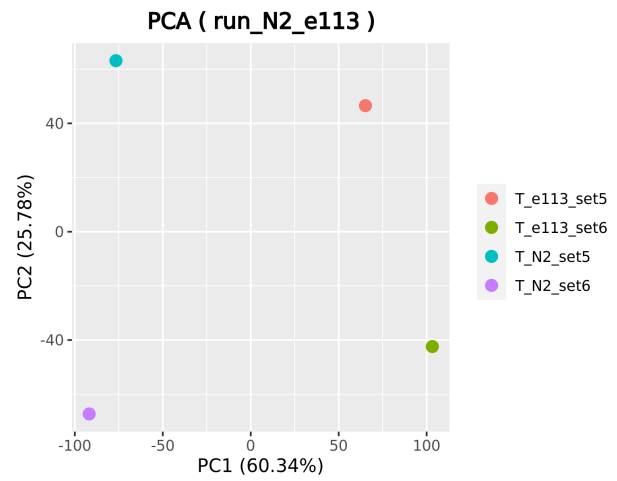
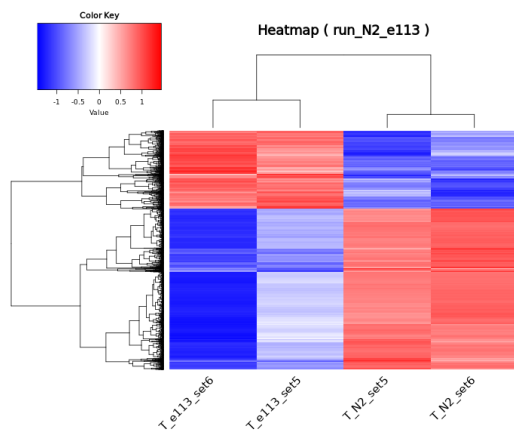
Top 10 UP for run_N2_e113			
Wormbase_Id	Sequence_id	Gene_name	log2FoldChange
WBGene00019449	K06H6.1	nan	8.7857
WBGene00008477	E03H4.10	cllec-17	8.1643
WBGene00015760	C14C6.6	nan	8.0394
WBGene00000749	ZC373.7	col-176	7.9397
WBGene00019623	K10C9.1	nan	7.7387
WBGene00008816	F14F8.8	nan	7.6263
WBGene00000618	T10B10.1	col-41	7.6213
WBGene00001068	F16F9.2	dpy-6	7.4190
WBGene00022816	ZK783.1	fbn-1	7.2069
WBGene00018619	F48G7.8	nan	7.2012

Top 10 DOWN for run_N2_e113			
Wormbase_Id	Sequence_id	Gene_name	log2FoldChange
WBGene00018911	F56A4.3	nan	-9.4636
WBGene00022495	Y119D3B.19	fbxa-78	-7.1588
WBGene00045270	C04E7.5	nan	-7.0679
WBGene00007459	C08F11.12	nan	-6.9570
WBGene00018062	F35F10.13	nan	-6.2779
WBGene00018225	F40B5.1	nep-14	-6.0836
WBGene00004170	Y73F8A.8	pqn-90	-5.7193
WBGene00009104	F25C8.1	nan	-5.6225
WBGene00003462	F09C12.7	msp-74	-5.5895
WBGene00185117	C45B11.9	nan	-5.4953





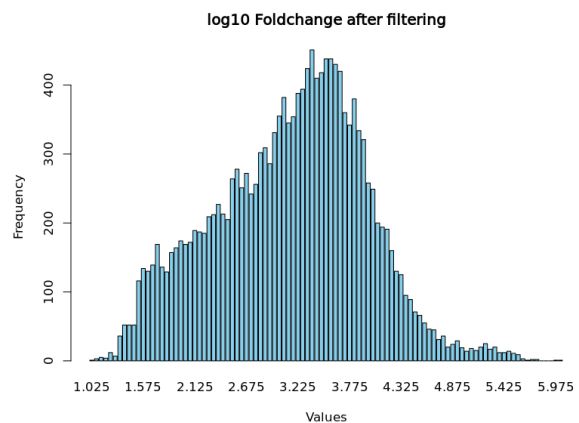
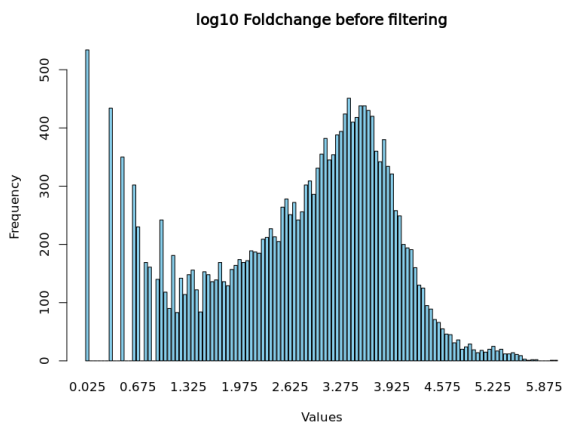
RNA Seq Analysis



DESeq2 Data Preparation

Low Count Filtering

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



Low Count Filter		
lib-name	Before	After
T_N2_set5	18,983,027	18,978,351
T_N2_set6	19,183,823	19,179,339
T_e113_set5	24,093,573	24,087,332
T_e113_set6	20,028,789	20,023,383
T_ky5_L4_set5	18,528,861	18,524,176
T_ky5_L4_set7	18,148,159	18,143,604