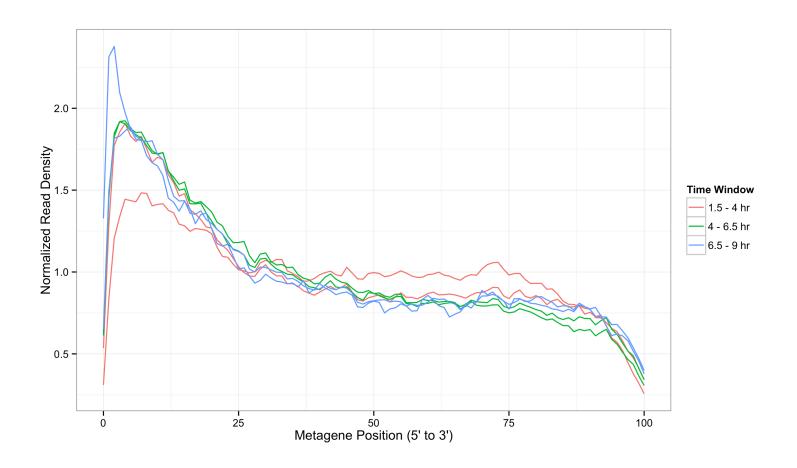
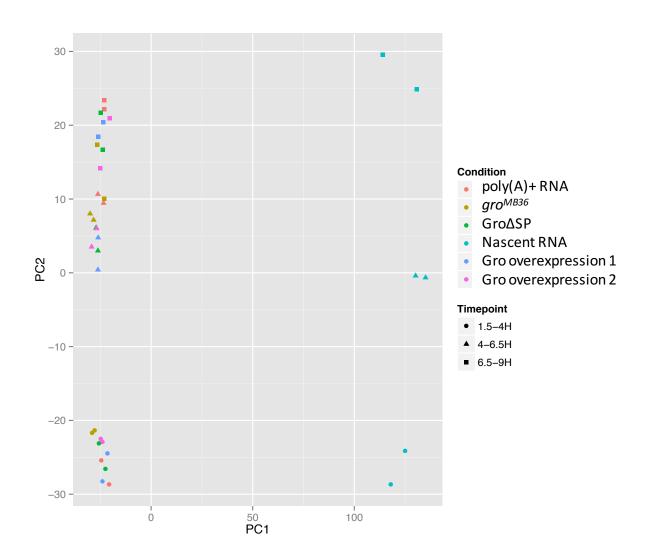
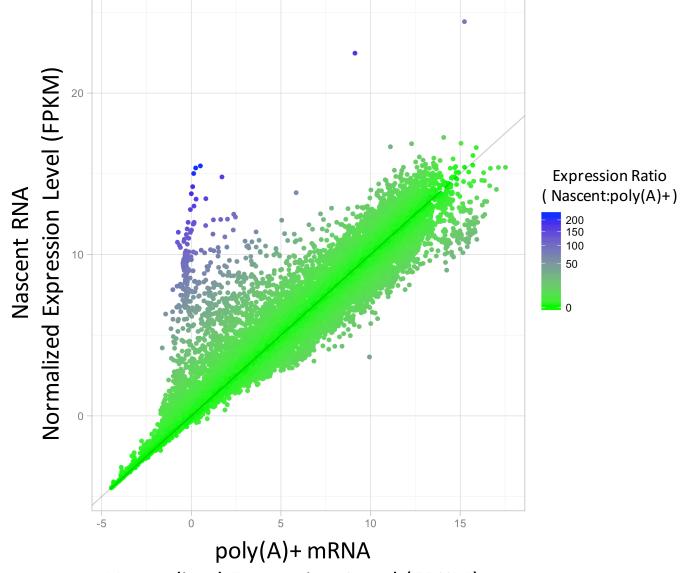


α-Η3



| Condition   | Time window | Total Reads | Transcript Reads | %   | Exon Reads | %   | Intron Reads | %   | 5'UTR Reads | %  | 3'UTR Reads | %   |
|-------------|-------------|-------------|------------------|-----|------------|-----|--------------|-----|-------------|----|-------------|-----|
| Nascent     | 1.5 - 4 hr  | 13,396,998  | 12,869,419       | 96% | 9,630,349  | 72% | 3,991,330    | 30% | 827,902     | 6% | 717,773     | 5%  |
| Nascent     | 1.5 - 4 hr  | 14,402,702  | 14,074,143       | 98% | 13,143,526 | 91% | 1,256,036    | 9%  | 384,863     | 3% | 405,031     | 3%  |
| Nascent     | 4 - 6.5 hr  | 19,102,357  | 18,102,323       | 95% | 10,249,092 | 54% | 9,274,889    | 49% | 1,495,488   | 8% | 1,038,051   | 5%  |
| Nascent     | 4 - 6.5 hr  | 15,913,811  | 15,082,718       | 95% | 8,935,177  | 56% | 7,285,111    | 46% | 1,198,370   | 8% | 883,736     | 6%  |
| Nascent     | 6.5 - 9 hr  | 15,747,237  | 15,201,712       | 97% | 10,200,282 | 65% | 5,976,815    | 38% | 1,035,707   | 7% | 853,559     | 5%  |
| Nascent     | 6.5 - 9 hr  | 13,952,494  | 13,493,631       | 97% | 8,784,412  | 63% | 5,694,037    | 41% | 1,117,133   | 8% | 897,345     | 6%  |
|             |             |             |                  |     |            |     |              |     |             |    |             |     |
| poly(A) RNA | 1.5 - 4 hr  | 23,796,734  | 20,604,743       | 87% | 19,752,186 | 83% | 2,168,260    | 9%  | 975,884     | 4% | 3,986,880   | 17% |
| poly(A) RNA | 1.5 - 4 hr  | 38,083,224  | 30,341,487       | 80% | 27,976,746 | 73% | 4,214,078    | 11% | 1,392,513   | 4% | 5,761,724   | 15% |
| poly(A) RNA | 4 - 6.5 hr  | 37,870,358  | 32,424,416       | 86% | 28,651,441 | 76% | 5,631,405    | 15% | 1,385,828   | 4% | 6,037,661   | 16% |
| poly(A) RNA | 4 - 6.5 hr  | 36,076,928  | 29,887,172       | 83% | 26,704,160 | 74% | 4,787,606    | 13% | 1,198,679   | 3% | 5,352,807   | 15% |
| poly(A) RNA | 6.5 - 9 hr  | 30,597,716  | 26,509,005       | 87% | 24,452,990 | 80% | 3,777,231    | 12% | 1,258,219   | 4% | 5,190,917   | 17% |
| poly(A) RNA | 6.5 - 9 hr  | 26,551,585  | 23,282,466       | 88% | 20,952,590 | 79% | 3,886,388    | 15% | 1,196,059   | 5% | 4,597,938   | 17% |





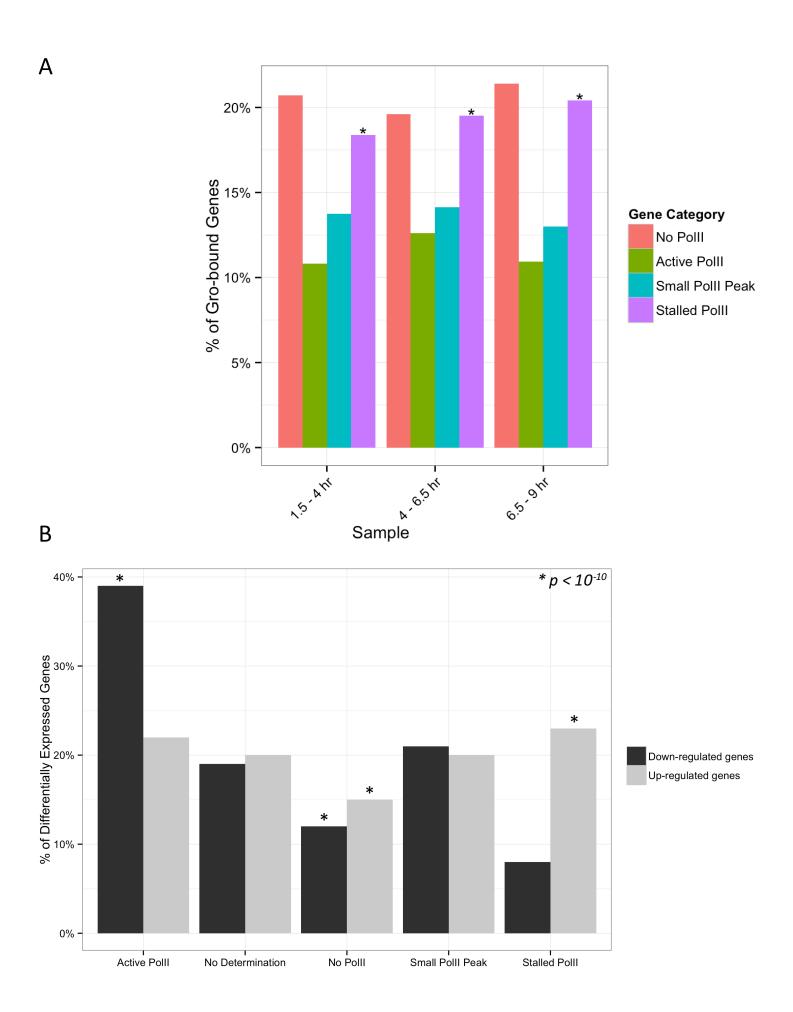
Normalized Expression Level (FPKM)

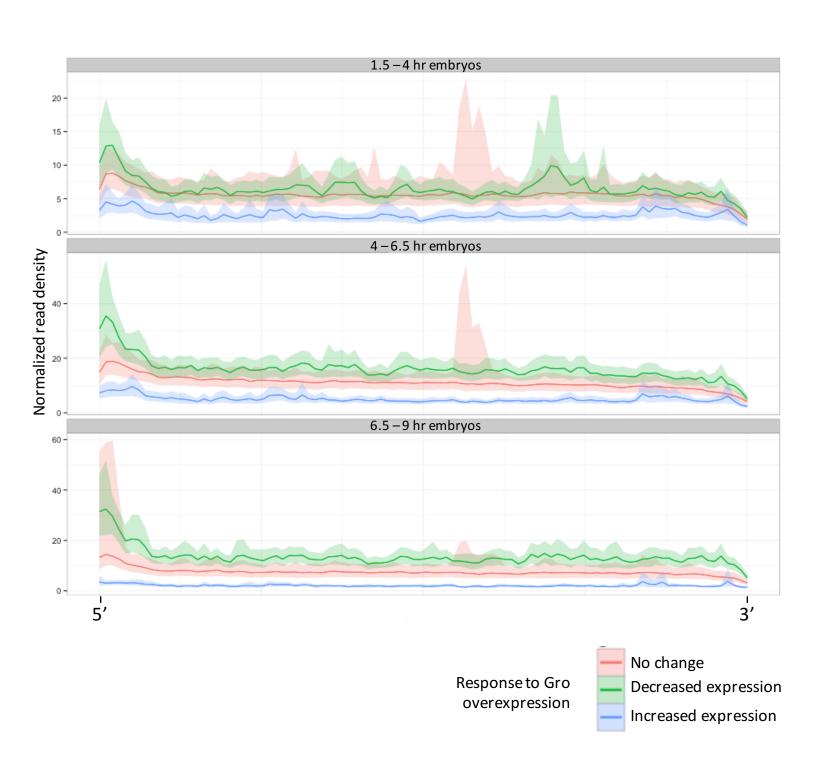
|            | Relave nascent transcript abundance |        |  |
|------------|-------------------------------------|--------|--|
|            | Lower                               | Higher |  |
| 1.5 - 4 hr | 2,831                               | 3,097  |  |
| 4 - 6.5 hr | 3,200                               | 3,735  |  |
| 6.5 - 9 hr | 2,910                               | 3,187  |  |

## В

| Lower Relative Abundance             |          |         |  |  |
|--------------------------------------|----------|---------|--|--|
| BDGP Term Enrichment                 | p-value  | # genes |  |  |
| maternal                             | 3.09E-86 | 1541    |  |  |
| ubiquitous                           | 7.16E-45 | 847     |  |  |
| anterior midgut primordium           | 6.21E-29 | 505     |  |  |
| posterior midgut primordium          | 2.40E-26 | 514     |  |  |
| trunk mesoderm primordium            | 1.80E-20 | 411     |  |  |
| anterior endoderm primordium         | 3.51E-15 | 292     |  |  |
| embryonic midgut                     | 5.09E-15 | 587     |  |  |
| posterior endoderm primordium        | 5.20E-14 | 299     |  |  |
| dorsal prothoracic pharyngeal muscle | 1.13E-12 | 220     |  |  |
| head mesoderm primordium P2          | 1.76E-09 | 253     |  |  |
| embryonic/larval muscle system       | 3.69E-09 | 277     |  |  |
| head mesoderm primordium             | 8.15E-09 | 153     |  |  |
| posterior endoderm primordium P2     | 2.19E-08 | 218     |  |  |
| anterior endoderm anlage             | 6.20E-08 | 205     |  |  |
| faint ubiquitous                     | 1.26E-07 | 437     |  |  |

| Higher Relative Abundance                     |          |         |  |  |
|---|----------|---------|--|--|
| BDGP Term Enrichment                          | p-value  | # genes |  |  |
| ventral nerve cord                            | 1.19E-24 | 452     |  |  |
| ventral epidermis primordium                  | 5.92E-24 | 159     |  |  |
| dorsal ectoderm primordium                    | 9.17E-23 | 152     |  |  |
| dorsal ectoderm anlage in statu nascendi      | 3.07E-22 | 137     |  |  |
| ventral ectoderm anlage in statu nascendi     | 1.25E-20 | 125     |  |  |
| embryonic brain                               | 1.14E-19 | 431     |  |  |
| dorsal epidermis primordium                   | 2.17E-19 | 167     |  |  |
| procephalic ectoderm anlage in statu nascendi | 5.27E-19 | 123     |  |  |
| ventral ectoderm primordium P2                | 2.40E-18 | 169     |  |  |
| ventral ectoderm primordium                   | 7.18E-17 | 139     |  |  |
| gap   | 6.36E-13 | 56      |  |  |
| embryonic ventral epidermis                   | 1.43E-12 | 245     |  |  |
| procephalic ectoderm anlage                   | 1.44E-12 | 140     |  |  |
| embryonic dorsal epidermis                    | 2.56E-12 | 266     |  |  |
| tracheal primordium                           | 7.27E-12 | 90      |  |  |





| Target             | Sequence                            |
|--------------------|-------------------------------------|
| 2s                 | CTTACAACCCTCAACCATATGTAGTCCAAGCAGC  |
| 18s                | CAATAATGATCCTTCCGCAGGTTC            |
| 5.8s               | CAGCATGGACTGCGATATGCGTTC            |
| 28s alpha          | ATTTTCGCTTTCGCCTTGAAC               |
| 28s Beta           | TCGAATCATCAAGCAAAGGATAAGC           |
| 28s                | GTGTTAATTAGCTATAAATAGCTAAAAAACTAATC |
| 28s                | CAGGTTACGGAATTGGAACCGTATTCCCTTTCGTT |
| 28s                | CAATCTTCAGAGCCAATCCTTATCCCGAAGTTACG |
| 28s                | GCCCGTTCCCTTGGCTGTGGTTTCGCTAG       |
| 18s                | GAACAGAGGTCTTATTTCATTATCCCATGCACAGA |
| 18s                | CGGTACAAGACCATACGATCTGCATGTTATCTAGA |
| 18s                | TTTAATTGCATGTATTAGCTCTAGAATTACCACAG |
| 5s                 | AAGTTGTGGACGAGGCCAACACACGCGGTGTTCCC |
| 5'_end_of_rRNA     | TATTCCTATTATCCGCGGAG                |
| 5'_end_of_rRNA     | CCATTCGAATACGGCCATTT                |
| nodavirus RNA1     | ACCTCCGCCCTTTCGGGCTAGAAC            |
| nodavirus RNA2     | ACCTTAGTCGGCTGACTTAAACTGTC          |
| totivirus SW-2009a | CGACTATATCTTCTGCGTTATCCAGC          |
| oligo dT           | тттттттттт                          |