Table S1. Top Enriched\(^1\) GO Terms among genes with parent-of-origin effects with maternal-like transcript levels for Early- and Late-Ovarian samples

<table>
<thead>
<tr>
<th>Condition(^2)</th>
<th>Transcription bias (Strain)(^3)</th>
<th>Term</th>
<th>Count</th>
<th>Percent of Total</th>
<th>P Value</th>
<th>FDR-corrected q value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early</td>
<td>375</td>
<td>structural constituent of vitelline membrane</td>
<td>4</td>
<td>6.35</td>
<td>3.16x10(^{-07})</td>
<td>4.26x10(^{-05})</td>
</tr>
<tr>
<td></td>
<td></td>
<td>vitelline memb. form. in chorion-cont. eggshell</td>
<td>4</td>
<td>6.35</td>
<td>6.48x10(^{-06})</td>
<td>2.36x10(^{-03})</td>
</tr>
<tr>
<td></td>
<td></td>
<td>vitelline membrane formation</td>
<td>4</td>
<td>6.35</td>
<td>6.48x10(^{-06})</td>
<td>2.36x10(^{-03})</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ovarian follicle cell development</td>
<td>8</td>
<td>12.7</td>
<td>2.44x10(^{-05})</td>
<td>4.44x10(^{-03})</td>
</tr>
<tr>
<td></td>
<td></td>
<td>extracellular matrix organization</td>
<td>4</td>
<td>6.35</td>
<td>3.45x10(^{-05})</td>
<td>4.19x10(^{-03})</td>
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<tr>
<td></td>
<td>208</td>
<td>cell morphogenesis</td>
<td>72</td>
<td>9.3</td>
<td>1.68x10(^{-13})</td>
<td>3.37x10(^{-10})</td>
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<tr>
<td></td>
<td></td>
<td>cellular component morphogenesis</td>
<td>79</td>
<td>10.21</td>
<td>3.18x10(^{-13})</td>
<td>3.17x10(^{-10})</td>
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<tr>
<td></td>
<td></td>
<td>neuron differentiation</td>
<td>68</td>
<td>8.79</td>
<td>3.44x10(^{-13})</td>
<td>2.29x10(^{-10})</td>
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<tr>
<td></td>
<td></td>
<td>neuron development</td>
<td>61</td>
<td>7.88</td>
<td>6.16x10(^{-13})</td>
<td>3.08x10(^{-10})</td>
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<tr>
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<td></td>
<td>ribonucleotide binding</td>
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<td>15.5</td>
<td>8.10x10(^{-13})</td>
<td>5.35x10(^{-10})</td>
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<tr>
<td>Late</td>
<td>375</td>
<td>neuron development</td>
<td>6</td>
<td>22.22</td>
<td>1.09x10(^{-03})</td>
<td>n.s.</td>
</tr>
<tr>
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<td></td>
<td>neuron differentiation</td>
<td>6</td>
<td>22.22</td>
<td>2.26x10(^{-03})</td>
<td>n.s.</td>
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<td>behavior</td>
<td>6</td>
<td>22.22</td>
<td>2.79x10(^{-03})</td>
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<td>25.93</td>
<td>8.79x10(^{-03})</td>
<td>n.s.</td>
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<td>2.92</td>
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<td>8.28x10(^{-10})</td>
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<td>2.43</td>
<td>1.83x10(^{-09})</td>
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<td>1.66x10(^{-07})</td>
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<td>2.19</td>
<td>2.77x10(^{-07})</td>
<td>3.40x10(^{-04})</td>
</tr>
</tbody>
</table>

\(^1\) The top 5 most enriched GO terms are shown for each category. \(^2\) Early and Late indicate *Drosophila* Early- and Late-ovarian transcriptome. \(^3\) Transcription bias indicates the maternal strain towards which a gene shows similarity while showing differential transcription levels between the offspring of reciprocal crosses. (n.s., \(q > 0.05\).)
Table S2. Top Enriched\(^1\) GO Terms among genes with parent-of-origin effects with maternal-like transcript levels

<table>
<thead>
<tr>
<th>Transcription bias (Strain)(^2)</th>
<th>Term</th>
<th>n</th>
<th>Percent of Total</th>
<th>P value</th>
<th>FDR-corrected q value</th>
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</thead>
<tbody>
<tr>
<td>375</td>
<td>structural constituent of vitelline membrane</td>
<td>4</td>
<td>6.45</td>
<td>3.16x10(^{-7})</td>
<td>4.26x10(^{-5})</td>
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<td>vitelline membrane formation in chorion-containing eggshell</td>
<td>4</td>
<td>6.45</td>
<td>6.48x10(^{-6})</td>
<td>2.36x10(^{-3})</td>
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<tr>
<td></td>
<td>vitelline membrane formation</td>
<td>4</td>
<td>6.45</td>
<td>6.48x10(^{-6})</td>
<td>2.36x10(^{-3})</td>
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<td></td>
<td>ovarian follicle cell development</td>
<td>8</td>
<td>12.9</td>
<td>2.44x10(^{-5})</td>
<td>4.44x10(^{-3})</td>
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<td>extracellular matrix organization</td>
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<td>6.45</td>
<td>3.45x10(^{-5})</td>
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<td>208</td>
<td>cell morphogenesis</td>
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<td>1.80x10(^{-14})</td>
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<td>8.80x10(^{-14})</td>
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<td>4.08x10(^{-09})</td>
</tr>
</tbody>
</table>

\(^1\) The top 5 most enriched GO terms are shown for each category. \(^2\) Transcription bias indicates the maternal strain towards which a gene shows similarity while showing differential transcription levels between the offspring of reciprocal crosses.