

Supplementary Figure S1

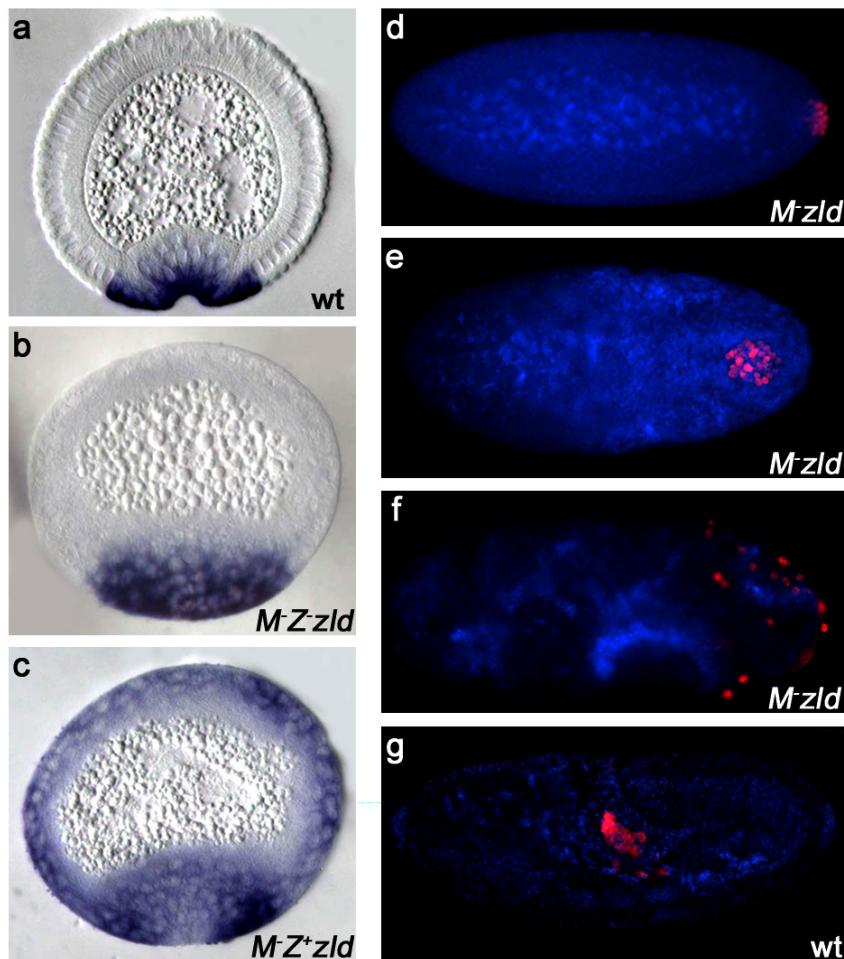


Figure S1. Maternal Zld is required for gastrulation but not pole cell formation. (a-c) Cross-sections of wt (a) and *M zld²⁹⁴* (c) embryos hybridized with *sna* probe (a,b) to highlight the ventral furrow, and *lacZ* (b,c) to distinguish whether embryos carry the *FM7ftz-lacZ* Balancer chromosome (*z/d⁺*). In *M Z zld* (b) and *M Z⁺ zld* (c) embryos, a ventral furrow appear to initiate but does not form. (d-g) *M zld²⁹⁴* and wt whole-mounted embryos stained with DAPI (blue) and α -Vasa antibody (red) to visualize the pole cells, which appear normal in *M zld* early cycle 14 (d) and early gastrulating (e) embryos. Note that the germ band begins to extend (e), but fails to continue in older embryos, and the pole cells become scattered (f) in contrast to wt (g). Interestingly, pole cell formation is a process that does not require zygotic transcription^{29,30}.

Supplementary Figure S2

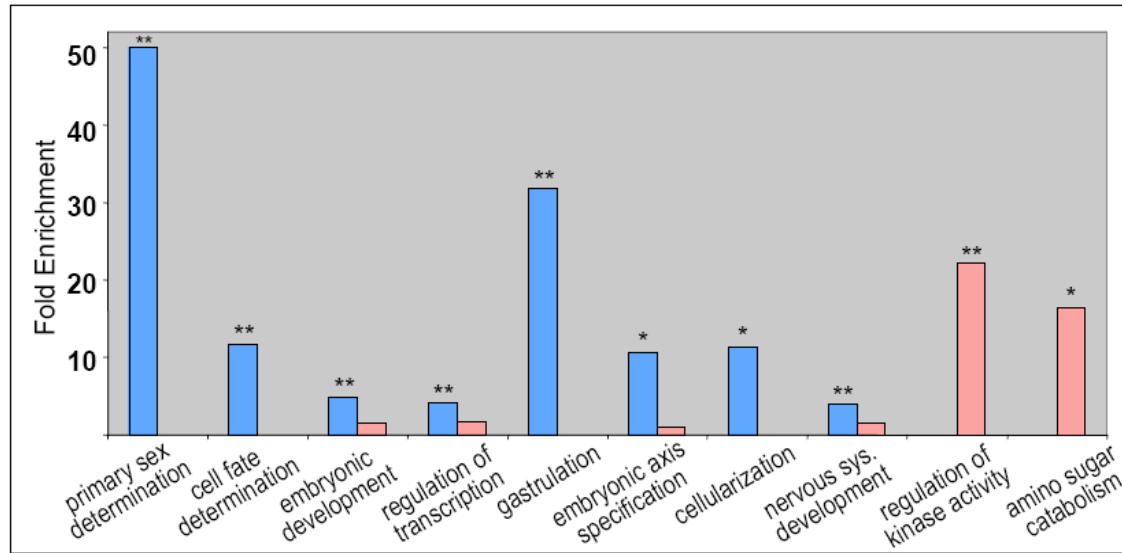


Figure S2. GO terms for specific biological processes significantly enriched in the sets of down-regulated (blue bars) and up-regulated (red bars) genes (EASE analysis, [*] $p<0.05$, [**] $p<0.01$).