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SUPPLEMENTARY MATERIAL

corresponding to:

Large-scale production of growing oocytes *in vitro* from neonatal mouse ovaries

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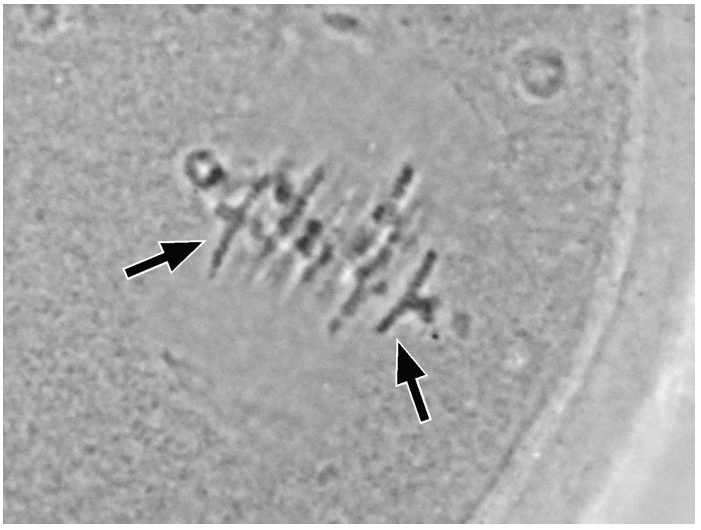
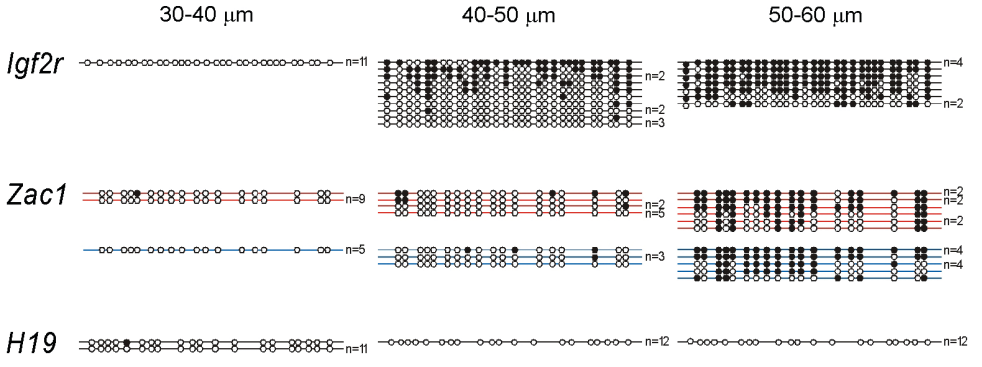


Supplementary Fig. 1. Formation of tetrad chromosomes within MII ooplasm. In vitro-*growing oocytes were fused with MII ooplasm using inactivated Sendai virus (Obata and Kono, 2002) and their chromosomal integrity was observed. The donor chromosomes condensed within one hour and showed a typical tetrad composition with some undergoing chromosomal crossover (arrows).*



Supplementary Fig. 2. The methylation status of the differentially methylated regions of three imprinted genes, *Igf2r, Zac1,* and *H19,* in oocytes growing *in vivo* in juvenile mice. *Oocytes were collected from juvenile B6D2F1 ([C57B/6 X DBA/2]F1) mice and analyzed. The methylation patterns of the two maternally imprinted genes,* Igf2r *and* Zac1*, suggest that genomic imprinting was established in an oocyte-size-dependent manner. The paternally imprinted gene,* H19*, remained unmethylated, irrespective of the size of the oocyte. Because there are DNA polymorphisms between the C57BL/6 and DBA/2 mouse strains in the methylation region analyzed in* Zac1*, the maternal allele sequences and paternal allele sequences are indicated by red and blue lines, respectively.*