



Figure 6. Regulation of the X Chromosomes through the Life Cycle of an XX Hermaphrodite

This figure illustrates that the X chromosomes are regulated by different mechanisms at different stages and in different tissues: imprinted X inactivation (I) of the paternal X in the early embryo, dosage compensation (DC) in the somatic tissues of 30-cell and later-stage embryos and worms, and MES-mediated silencing in the germ line. Meiotic silencing of unpaired DNA (MSUD) also occurs in the germ line; this silences the single X chromosome in XO males.