



FIGURE 11.3. (A) (Top) A wild-type larvae with schematic of gene expression patterns (*Ubx*, blue; *abdA*, yellow; *AbdB*, brown). Lower larvae illustrate the homeotic transformation in segment identity that occurs in null alleles of *Ubx*, *abdA*, and *AbdB*. In all cases, the total number of segments is unchanged, but segment identity is altered. (B) Antibody staining reveals Hox protein distribution in wild-type embryos (blue arrows point to the boundary between T2 and T3). By about mid-embryogenesis (top two embryos), *Ubx* protein is detected in T3 and throughout most of the abdomen. Bottom embryo (ventral view) shows the simultaneous detection of four different Hox gene protein products (Scr, black; Antp, red; *Ubx*, blue; *AbdB*, brown). Note the sequential expression of the proteins along the anteroposterior axis of the embryo.

11.3A, modified from Lawrence P.A., *The Making of a Fly. The Genetics of Animal Design*, p. 112, © 1992 Blackwell Science; 11.3B, Nipam H. Patel