FIGURE 11.14. In grasshopper embryos Distal-less protein (red staining in all panels) is expressed in the appendages of the head, thorax, and the first abdominal segment. The white arrow in A points to the DII-expressing pleuropod appendage, which is part of the A1 segment. As in Drosophila, Ubx in grasshopper embryos is expressed throughout the entire abdomen during the time that appendages are first formed. Fluorescent double labeling for DII protein (red in B and D) and Ubx protein (green in C and D) shows that DII expression in the A1 appendage occurs despite the expression of Ubx in these same cells (overlap of green and red creates the yellow color seen in D), and thus Ubx does not appear to repress DII in grasshoppers.

11.14, Nipam H. Patel

Evolution © 2007 Cold Spring Harbor Laboratory Press