



Figure 10. Pachytene stage of spermatogenesis showing the dependence of sex-body formation on H2A.X. In normal mammalian spermatocytes, a nuclear structure, the sex body (arrow, green, in *right* panels), is seen to encompass the unpaired XY bivalent (labeled in *left* panels). The synaptonemal complex, which aligns paired chromosomes, is stained red. H2A.X is normally enriched in the sex body (H2A.X^{+/+}). In H2A.X^{-/-} spermatocytes, the sex body does not form and a sex-body epitope becomes dispersed (*lower right*). Scale bar, 10 μ m. (Images courtesy of Shantha Mahadevaiah and Paul Burgoyne; Fernandez-Capetillo et al. 2003.)