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Cover photograph : Collapse of DNA replication forks can produce cruciform DNA structures, termed chicken feet, as represented in the foreground. We propose that the homologous recombination protein encoded by *Xrcc2* is important to repair such collapsed replication forks in developing lymphocytes. In the absence of *Xrcc2* function, chicken feet are sensed as unrepaired DNA double strand breaks (as revealed by staining for phosphorylated histone H2AX [upper left]), leading to S-phase arrest and eventually chromosomal damage (shown by karyotype analyses [lower right]). *(See related article on page 2295.)*