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DNA unknotting and unlinking by XerCD-FtsK.

In 2007, Grainge *et al.* showed that, when coupled with FtsK, the site-specific recombinases XerC/XerD can unlink DNA catenanes and proposed a stepwise model of unlinking. We show that their model is the only pathway from the 2m-cat to the unlink when we assume that each recombination event reduces the crossing number. (Received December 12, 2011)