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^{OA}Open Access paper



Cover The human *DDX3X* and *DDX3Y* genes on Chr X and Chr Y, respectively, encode RNA helicases critical for translation and other cellular processes. In this issue, it is shown that *DDX3X* and *DDX3Y* are negatively, post-transcriptionally cross-regulated in 46,XY cells, and that *DDX3X* is negatively, post-transcriptionally auto-regulated in 46,XX cells. This means that perturbations to one allele (of *DDX3X* or *DDX3Y*) are buffered by upregulation of the other allele, making this the first instance of an X–Y gene pair with cross-regulatory capabilities. The cover depicts this intricate buffering of *DDX3X* and *DDX3Y* dosage as orange and purple rocks balanced on beams (Chr X and Chr Y, respectively). This dynamic system rests on a representation of the ancestral *DDX3X* ortholog (in gray), the autosomal precursor from which these human X and Y genes evolved. (Cover illustration by Caitlin Rausch, <https://www.warblercreative.work/>. [For details, see Rengarajan et al., pp. 20–30.]