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Using both strands

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In the February 22 Nature Labrador *et al.* challenge the central dogma that only one of the DNA strands is transcribed into a single precursor RNA and then translated into protein (*Nature* 2001, **409**:1000). They analysed transcripts at the *modifier of mdg4* mod(mdg4) locus of *Drosophila* using RNase protection. It appears that the major 2.2 kb transcript is generated by the fusion of two precursor RNAs: exons I to IV are transcribed from one DNA strand, while exons V and VI are transcribed using the complimentary strand as the DNA template. Labrador *et al.* propose that the two transcription units running in opposite orientations create two partially complimentary RNA precursors that may be joined by a trans-splicingmechanism. Such a scenario has implications for our understanding of eukaryotic genome complexity and evolution.

References

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