

More gene wars

In the otherwise fascinating article 'Gene wars' by Uma Shaanker and Ganeshiah¹, there is an incorrect statement. The authors state, '... the interest of the offspring is not similar to that of the mother *as long as they are sired by more than one father*; selection acts on each offspring favouring increase in the offspring's own fitness by demanding more than the mother is selected to give [italics mine].' In sexually reproducing diploid organisms, no two siblings (even full siblings) other than identical twins are identical in all 100 per cent of their genes. The average coefficient of genetic relatedness between full siblings (from the same father and the same mother) under outbreeding is 0.5. The interests of the mother (who is related equally to all her offspring) will therefore not be similar to that of her offspring because each offspring is related to itself by 1.0 and by no more than 0.5 even to its full siblings. Thus even when the offspring are *sired by the same father*, selection should act on them to demand more from their mother than she is selected to give². This should of course make gene wars even more common.

1. Uma Shaanker, R. and Ganeshiah, K. N., *Curr. Sci.*, 1991, **61**, 440.
2. Trivers, R. L., *Am. Zool.*, 1974, **14**, 249.

RAGHAVENDRA GADAGKAR

*Centre for Ecological Sciences
and Centre for Theoretical Sciences
Indian Institute of Science
Bangalore 560 012*