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This amoeba is a cheater

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Dictyostelium discoideum are usually haploid, asexually dividing, unicellular amoebae, but when starved they aggregate to form a slug that then differentiates to form a sterile stalk supporting viable spore cells. In the 21/28 December Nature Strassmann *et al*. find that *Dictyostelium* of different genotypes can combine to form a chimeric fruiting body, and that half of the chimeras contain cells that cheat to maximize their contribution to the spore cell compartment (*Nature* 2000, **408**:965-967). The more effective cheaters are not biased to form more spore cells in all situations. When these cheaters are induced to form slugs and fruiting bodies of a single genotype, they do not make greater numbers of spores versus stalk cells, suggesting that in the chimeras a special cheating process is being activated. This makes *Dictyostelium* an excellent model system for studies of altruism and cheating, but may complicate developmental studies, as many between-cell signaling events may involve deception and manipulation.

References

1. *Nature*, [http://www.nature.com/nature/]

2. Dictyostelium amoebae lacking an F-box protein form spores rather than stalk in chimeras with wild type.