

# Mammals, fruit flies: same biological clock

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New York University and University of London scientists say they've found more evidence that mammals and fruit flies share a common genetic makeup.

*Drosophila* fruit flies are commonly used for research on biological, or circadian, clocks because of the relative ease of finding mutants with non-24-hour rhythms and then identifying the genes underlying the altered behavior.

The NYU and London studies of fruit flies have allowed the identification of "clock genes" in mammals, which function in a similar manner in mammals as they do in a fly's clock. However, prior to the study, biologists had concluded that the role of one protein -- Cryptochrome, called Cry -- was quite different between flies and mammals.

In fruit flies, Cry is a circadian photoreceptor, which helps light reset the biological clock with changing seasons. In mammals, however, Cry assists in the 24-hour rhythmic expression of clock genes and has nothing to do with re-setting the clock.

The study appears in the latest issue of *Current Biology*.

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