

A small animal for small research

The fruit fly, *Drosophila melanogaster*, has been a popular alternative to vertebrate models in many areas of biomedical research. In research years, that's extended to studies of the microbiome, the collection of microorganisms that inhabit a host and are increasingly appreciated by scientists as contributors to health and disease. In a new Review, Angela Douglas from Cornell University details *Drosophila* as a model for microbiome research. She covers the anatomy and physiology of the fly gut, methods and techniques to study and manipulate its microbiome, and its current and future research uses. It may be small, but *Drosophila* seems poised to pack a big punch in microbiome experiments.

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Researchers turn to DIY solutions

Have you ever wanted to collect new data, but found yourself limited by access to expensive commercial equipment or software that doesn't quite meet your experiment's needs? Researchers often find themselves in such a predicament, but rather than just adjust to what's available, a growing community is turning to DIY solutions. Open-source and freely available designs and software and inexpensive hardware alternatives are opening new avenues for *in vivo* researchers, from novel arenas for testing fly behavior to shrinking equipment for manipulating neurons in mice. Read more from Jim Kling in the June Technology Feature.

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