

Fishing through the microbiome

The zebrafish is growing in popularity as a model organism in a number of different areas of research, from development to disease with much in between. That includes studies of the microbiome, the microbial communities increasingly recognized for their contributions to animal health as well as disease.

In a new Review article, Keaton Stagaman, Thomas Sharpton, and Karen Guillemin from the University of Oregon discuss the zebrafish as a model system for studying the vertebrate microbiome. They highlight a number of results obtained with zebrafish microbiome models so far, and they describe methods for observing and manipulating the fish microbiome to study its influence on both larval and adult stage animals.

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The virus inside...

When an animal mysteriously become sick, what's the culprit? Metagenomics, technologies that survey and sequence microbes found in the environment, can help researchers and animal care staff determine any microbial influence and eliminate it from their facility. But often, infections can be asymptomatic—though not without potential influence on the animals, even if they aren't becoming ill.

The July Technology Feature explores how people are finding novel viruses hiding inside (and outside) their animal facilities, including how to identify unknown pathogens and what to do about them once they are made known.

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