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Cover photograph (Copyright © 2016, American Society for Microbiology. All Rights Reserved.): Bright-field micrograph of the marine invertebrate *Bugula neritina* (phylum Bryozoa). Feeding zooids (~1 mm) can be seen extending their crowns of tentacles (lophophores) outwards. The ciliated tentacles beat in order to draw plankton towards the zooids' mouths at the base of the lophophores. Spherical ovicells can also be seen harboring embryos, soon to be released as larvae. Within the channels that transport nutrients throughout the colony, called funicular cords, lives an uncultured bacterial symbiont, "*Candidatus* Endobugula sertula." This symbiont is transferred to the growing embryos in the ovicell and produces toxic compounds, called bryostatins, to protect the free-swimming larvae from predation. (See related article on page 6573.)