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Cover photograph (Copyright © 2008, American Society for Microbiology. All Rights Reserved.): Scanning electron microscopic image of MSC33, a typical marine “uncultivable” microorganism that refused to grow on standard media in the laboratory. Its growth restrictions are eliminated by a short peptide with an apparent signaling function. Culture preparation by Dominica Nichols, Northeastern University; photo courtesy of William Fowle, Northeastern University. (See related article in August 2008, vol. 74, no. 15, p. 4887.)