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Cover photograph (Copyright © 2006, American Society for Microbiology. All Rights Reserved.): Field emission scanning electron micrograph of strain SOSP1-21^T, a representative of a newly discovered lineage of filamentous, spore-forming, gram-positive bacteria. In addition to vegetative and aerial hyphae, noteworthy is the interlacement of spores originating from three or more sporophore hyphae to form a cluster, giving strain SOSP1-21^T a grape-like appearance. Spores are spherical, with a diameter of 1.6 to 1.8 μm, and appear to have an internal scaffold, covered by a tight sheet in young spores, which collapses on the scaffold as dehydration proceeds, giving spores a corrugated aspect. (See related article on page 4360.)