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Cover photograph (Copyright © 2007, American Society for Microbiology. All Rights Reserved.): Early-stage biofilm formed by a mixture of *Pseudomonas aeruginosa* wild type (GFP tagged), *P. aeruginosa pilA* (CFP tagged), and *P. aeruginosa rhlA* (YFP tagged). A confocal laser scanning microscope equipped with a special detector system allowed the simultaneous detection of the three closely related spectral variants of GFP. During early stages of biofilm development each strain forms separate small microcolonies on the surface by clonal cell proliferation. However, during later stages of biofilm development the three strains jointly form mushroom-shaped multicellular structures in which they comprise different parts dependent on their ability to migrate and produce biosurfactants. (See related article on page 2531).