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MOLECULAR GENOMICS

**Identification of Multilocus Genetic Heterogeneity in *Anaplasma marginale* subsp. *centrale* and Its Restriction following Tick-Borne Transmission**

David R. Herndon, Massaro W. Ueti,  
Kathryn E. Reif, Susan M. Noh, Kelly A.  
Brayton, Joseph T. Agnes, Guy H.  
Palmer

1852–1858

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*Cover photograph* (Copyright © 2013, American Society for Microbiology.): Scanning emulsion microscopy image of T84-cell monolayer infected with the Shiga toxin type 2 (Stx2)-producing *Escherichia coli* O104:H4 strain C227-11, which was isolated in the 2011 German outbreak. Cells were infected with O104:H4 bacteria for 3 h and then were washed and fixed with 4% paraformaldehyde. Slides were stained with Hoechst 33342 to visualize cell nuclei and bacterial cells (blue), with Phalloidin 654 to visualize actin (pink), and with an anti-Stx2 monoclonal antibody (11E10) followed by secondary donkey anti-mouse antibody conjugated to Alexa Fluor 488 to stain Stx2 (green). Samples were imaged using a Zeiss Elyra structured illumination microscope. Magnification, ×63. (Photo courtesy of Ninell Pollas Mortensen, Oak Ridge National Laboratory, Oak Ridge, TN, and Nadia Boisen, University of Virginia School of Medicine, Charlottesville, VA.) (See related article on p. 1562.)