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**Swine Influenza Virus PA and Neuraminidase Gene
Reassortment into Human H1N1 Influenza Virus Is Associated
with an Altered Pathogenic Phenotype Linked to Increased MIP-
2 Expression**

Daniel Dlugolenski, Les Jones,
Elizabeth Howerth, David Wentworth,
S. Mark Tompkins, Ralph A. Tripp

5651–5667

Cover photograph (Copyright © 2015, American Society for Microbiology. All Rights Reserved.): Organotypic raft sections of primary human foreskin keratinocytes (HFKs) containing wild-type human papillomavirus 18 (HPV18; left panels) or HPV18 mutated to prevent binding of the host cell protein CTCF to the viral genome (Δ CTCF; right panels). Sections were stained by immunofluorescence to highlight expression of the differentiation markers keratin 1 (green; upper panels) or loricrin (lower panels) and HPV18 E1^{E4} (red) to highlight productive areas of virus replication. Nuclei were counterstained with Hoechst (blue). Abrogation of CTCF binding causes hyperproliferation of stratified epithelia as a result of deregulated expression of the E6 and E7 viral oncoproteins. (See related article in May 2015, vol. 89, no. 9, p. 4770.)