



International Conference and Exhibition on

# VIROLOGY

5-7 September 2011 Baltimore, USA

## **Pork industry intensification and the changing ecology and epidemiology of swine-origin influenza**

**Michael Greger**

Humane Society International, USA

The 2009 swine-origin influenza virus A subtype H1N1 (S-OIV) pandemic resulted in an alarming increase in pediatric influenza mortality. According to phylogenetic analyses, each segment of the S-OIV genome derives from swine influenza lineages circulating primarily in pigs for at least a decade before the pandemic emerged. Considerable genetic and antigenic stability had characterized most swine influenza virus isolates in North America for 80 years before the emergence of the primary progenitor of S-OIV, the triple reassortment swine flu virus first identified in U.S. pig herds in 1998, which became established throughout North America and generated further reassortment viruses and sporadic human infection. Changes in industry structure and husbandry practices that may have played a role in this shifting dynamic are explored. Identifying and resolving conflicting priorities between veterinary and public health professions can bolster the One Health vision and may help prevent the emergence and spread of pathogens with pandemic potential.

### **Biography**

A graduate of the Cornell University School of Agriculture and the Tufts University School of Medicine, Michael Greger, M.D., serves as Director of Public Health and Animal Agriculture at The Humane Society of the United States. An internationally recognized lecturer, he has presented at the Conference on World Affairs, the National Institutes of Health, and the International Bird Flu Summit, testified before Congress, and was an expert witness in defense of Oprah Winfrey at the infamous "meat defamation" trial. His recent publications explore the public health implications of industrialized animal agriculture.