

Guest Editorial

Reviews in NeuroVirology: An introduction



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This issue highlights the intersection of neurovirology and emerging infectious diseases. The enclosed reviews illustrate several points: *first*, that many emerging infections, even those where the respiratory system is the primary site for clinical manifestations, e.g., SARS (see Yuen) or Nipah (see Bellini), can cause severe central and peripheral nervous system disease. *Second*, infections of wildlife and domestic animals pose threats to global human health. More than 75% of emerging infectious diseases, including AIDS, Nipah (Bellini), West Nile encephalitis (see Bernard and Briese), new variant Creutzfeldt Jakob disease (see Chesebro), influenza, and SARS are *zoonoses* (diseases caused by microbes that jump from animals to humans). The number of zoonotic microbes that jump to human hosts is increasing with close contact between wildlife, domestic animal and human populations due to political instability, deforestation, urbanization, international travel and trade (see Mackenzie). We have only defined a small portion of the microbial world and know little about the microbial flora of domestic animals let alone those in

the wild. It is imperative that we recognize how the convergence of human and comparative medicine in basic and translational research will impact public health. *Third*, despite advances in molecular biology and proteomics, classical gumshoe epidemiology, entomology and anatomic pathology are frequently the keys to pathogen surveillance and discovery. These latter fields do not receive appropriate emphasis or support.

Since this issue was conceived there have been new outbreaks of transplant-associated LCMV and rabies. Avian influenza has jumped to man heralding the real possibility of the next global pandemic. Fortunately, the risk posed by influenza has finally been recognized internationally. If these examples and history is any guide, neurovirology will be in the vanguard of emerging infectious disease research for years to come. Any compilation of reviews no matter how comprehensive will undoubtedly be partially outdated at the time of publication. In this light, we apologize for any late breaking information inadvertently omitted.

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