Changing Trends in Infectious Agents
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I. Bacterial agents
   a. Streptococcus pneumoniae
      i. Serotype replacement
      ii. 13-valent conjugate vaccine
   b. Neisseria meningitidis
      i. Current low prevalence in US
      ii. New recommendation for booster dose of conjugate vaccine for adolescents
      iii. Progress on a vaccine for group B
   c. Haemophilus influenzae type b
      i. Rare breakthrough cases in US related to vaccine refusal
   d. Listeria monocytogenes
      i. Listeriosis as a food-borne disease
   e. Enterobacteriaceae and Acinetobacter
      i. Increase in broad antibiotic resistance
         1. KPCs
         2. NDM-1
   f. Mycobacterium tuberculosis
      i. Continued importance in developing world
      ii. The problem of multidrug resistance and its relationship to HIV co-infection
      iii. Prospects for rapid diagnosis
   g. Rickettsiae
      i. Ehrlchia as an emerging disease
      ii. Central nervous system manifestations
   h. Spirochetes and Borrelia
      i. Syphilis – current US epidemic
      ii. Lyme disease – on-going issues with diagnosis
      iii. Southern tick associated rash illness (STARI) – a real entity?

II. Viruses
   a. HSV
      i. Importance of HSV-2 as a CNS pathogen
      ii. Current approach to diagnosis and treatment
   b. VZV – current low prevalence in US related to universal immunization
   c. EBV – growing importance of post-transplant lymphoproliferative disorder (PTLD)
   d. CMV
      i. Current treatment approaches
ii. Drug resistance
e. JC virus – Possible therapeutic approaches
f. Enteroviruses and Parchoviruses
   i. What are parechoviruses?
   ii. Current approaches to diagnosis
g. HIV
   i. Status report on the epidemic – areas of active transmission
   ii. Drug treatment
h. West Nile – well established in US
i. Influenza
   i. Recap of 2009 epidemic
   ii. Review of the 2010-2011 season
   iii. Impact of universal annual immunization in US
   iv. Approaches to treatment

III. Fungi
   a. Cryptococcus – emergence of Cryptococcus gatti
   b. New therapeutic agents for fungal infections
      i. Lipid amphotericin B
      ii. Voriconazole, posaconazole and other azoles
      iii. Echinocandins

IV. Parasites
   a. Current status of malaria control
   b. New therapeutic agents – the artemisinins