Articles of Significant Interest Selected from This Issue by the Editors

Possible Effects of Meningococcal Vaccines on Commensal Bacteria

Recently, two vaccines that are largely based on recombinant proteins have been developed against Neisseria meningitidis. Both vaccines contain factor H binding protein (fHbp), which contributes to the ability of the meningococcus to avoid immune killing. Lavender et al. (e00305-17) show that a closely related commensal species, Neisseria cinerea, also expresses fHbp, which, as with N. meningitidis, promotes the survival of N. cinerea in human serum. Furthermore, a meningococcal vaccine containing fHbp elicits bactericidal activity directed against fHbp in N. cinerea. These findings highlight the potential impact of the meningococcal vaccines on members of the commensal flora.

Decoupling Morphogenesis from Downstream Hypha Virulence Factors during Vulvovaginal Candidiasis

The polymorphic fungus Candida albicans is the major etiological agent of vulvovaginal candidiasis (VVC). The secreted aspartyl proteinases (SAP) have long been implicated in fungal pathogenicity at the mucosal surface. However, their morphology-specific expression patterns have confounded attempts to assess their role in vivo. Willems et al. (e00248-17) engineered complementary sets of hypha-defective strains of C. albicans forced to overexpress SAP2 and SAP5. Using a mouse model of VVC, they demonstrate that C. albicans-mediated overproduction of these SAPs is insufficient to cause vaginal epithelial damage or inflammation in the absence of invasive hyphal growth.