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Focus on IgA

As Guest Editor, Nicholas Mantis provides an introduction for four papers in this issue that comprehensively review key aspects of immunoglobulin A biology. [See page 588](#)

Structure and function of human IgA

Jenny Woof and Michael Russell discuss the structure of human immunoglobulin A1 and A2 subclasses as well as sites important for specialized functions that may be targets of immunological subversion by microbes. [See page 590](#)

IgA transport

Finn-Eirik Johansen and Charlotte Kaetzel examine the transport of immunoglobulin A by the polymeric immunoglobulin receptor, including control of its expression and function by commensal microbiota. [See page 598](#)

Secretory IgA in intestinal immunity and homeostasis

Nicholas Mantis and colleagues review novel findings regarding the role of secretory immunoglobulin A (SIgA) in combating pathogens and toxins, controlling resident microbiota, and preventing untoward inflammation in the intestine. [See page 603](#)

Multifunctional Fc α RI

Jantine Bakema and Marjolein van Egmond discuss the major Fc receptor for immunoglobulin A, with attention to its roles in both promoting and suppressing inflammatory responses. [See page 612](#)

Disrupting biofilms

Steven Goodman and colleagues show the importance of DNABII, a protein produced by bacteria, in maintaining bacterial biofilms that contain extracellular DNA. They found that immunization against DNABII was able to disrupt pathogenic biofilms *in vivo*. [See page 625](#)

Macrophage-like cells and SLIT

Laurent Mascarell and colleagues present data supporting their hypothesis that CD11b $^{+}$ CD11c $^{-}$ macrophages are essential for tolerance induction following allergen-specific sublingual immunotherapy (SLIT). [See page 638](#)

Blocking vaginal SHIV transmission

Laurel Lagenaar and coauthors demonstrate that vaginal colonization with commensal *Lactobacillus jensenii* expressing the HIV-1 entry inhibitor cyanovirin-N inhibited vaginal transmission of simian HIV (SHIV) and decreased peak viral loads in breakthrough infections. [See page 648](#)

Synergism in inflammation to *T. gondii*

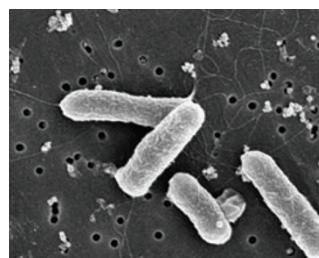
Charlotte Egan and co-workers observed intraepithelial lymphocytes, CD4 $^{+}$ lamina propria T cells, and intestinal bacteria in the pathogenesis of ileal necrosis following infection with *Toxoplasma gondii*. [See page 658](#)

Ectocervical inflammation and HIV-1 replication

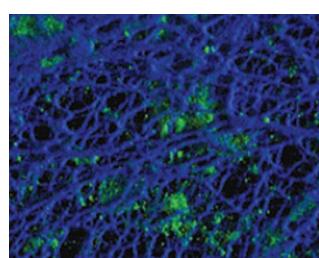
Christiane Rollenhagen and Susana Asin demonstrate that HIV-1 replication is enhanced in *ex vivo* ectocervical tissues from post- compared with premenopausal women, a phenomenon that appears to be due to an increased early inflammatory response. [See page 671](#)

Early influenza and asthma

Amal Al-Garawi and colleagues show that exposure to house dust mite (HDM) antigens coincident with acute influenza virus infection in neonatal mice subverts constitutive HDM hyporesponsiveness and imprints an asthmatic phenotype in adulthood. [See page 682](#)



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