

p 610

HAART and gut immunity

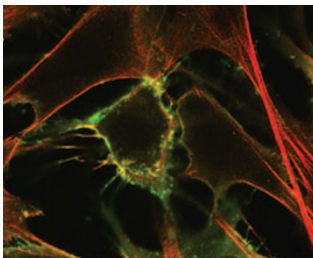
Cecilia Costiniuk and Jonathan Angel review literature addressing immune reconstitution and epithelial barrier function of the intestinal tract following treatment of HIV-infected patients with highly active antiretroviral therapy. [See page 596](#)

Alveolar macrophages and asthma

Jyoti Balhara and Abdelilah Gounni discuss the controversial role of alveolar macrophages in the pathogenesis of asthma. [See page 605](#)

Adjuvanticity of interferon- ϵ

Yang Xi and colleagues describe the ability of intranasal vaccinia virus coexpressing interferon- ϵ to drive strong antiviral mucosal immune responses that result in rapid viral clearance from the lung. [See page 610](#)



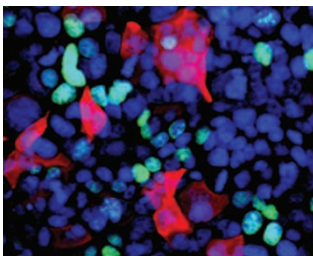
p 635

Suppressive DNA motifs in commensal bacteria

Nicolas Bouladoux and colleagues found that the capacity of bacterial DNA from *Lactobacillus* species to regulate immunity in the intestine depends on the presence of suppressive motifs that inhibit activation of lamina propria dendritic cells, sustain regulatory T-cell conversion during inflammation, and limit pathogen-induced immunopathology and colitis. [See page 623](#)

Targeting aminopeptidase N

Vesna Melkebeek and colleagues have identified aminopeptidase N, expressed at the epithelial cell brush border, as a receptor for F4 fimbriae of *Escherichia coli* and demonstrated its potential for vaccine targeting. [See page 635](#)



p 681

Loss of IL-17- and IL-22-producing lymphocytes in SIV

In the first of a series of papers on innate lymphocytes in the intestine in the presence of retroviral infections, Nichole Klatt and colleagues report that damage to the colon epithelial barrier by simian immunodeficiency virus infection was associated with loss of interleukin-17- and -22-producing lymphocytes as well as with CD103⁺ dendritic cells that may have a role in their generation. [See page 646](#)

Innate lymphoid cells and SIV

Huanbin Xu *et al.* describe populations of innate lymphoid cells in the blood and jejunum of macaques; cells in the latter make interleukin-17 and -22 and are lost upon infection with simian immunodeficiency virus. [See page 658](#)

IL-22-producing lymphocytes are lost in HIV infection

Connie Kim and colleagues investigated the loss of interleukin (IL)-22-producing lymphocytes in the colons of individuals with HIV infection. The loss is reversed by long-term highly active antiretroviral therapy. The authors also assessed the capacity of IL-22 to protect against HIV and tumor necrosis factor- α -induced epithelial damage *in vitro*. [See page 670](#)

GBP-1 inhibits epithelial cell proliferation

Christopher Capaldo and co-workers observed that cytokine-induced guanylate binding protein-1 production from epithelial cells acts in an autocrine manner to inhibit prometogenic β -catenin/T-cell-factor signaling. [See page 681](#)

Regulatory B cells in inhalational tolerance

Prabitha Natarajan *et al.* demonstrate that CD5⁺ transforming growth factor- β -producing regulatory B cells are generated in the hilar lymph nodes of mice following the development of local inhalational tolerance and may act to drive Foxp3⁺ regulatory T-cell differentiation. [See page 691](#)

CX3CL1 in conjunctivitis

Alexandre Denoyer and colleagues demonstrate a role for CX3CL1/CX3CR1 in the recruitment of inflammatory cells in a mouse model of conjunctivitis. [See page 702](#)

IgA and rotavirus infection

Sarah Blutt and colleagues demonstrate a direct role for immunoglobulin A in clearance of rotavirus infection and in protection against reinfection. [See page 712](#)