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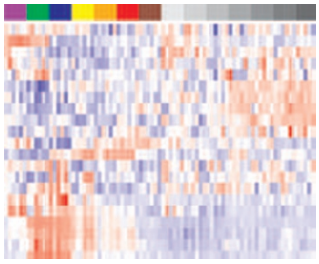


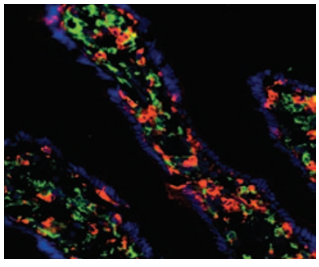
p 474

LXA_4 and endometriosis

Geraldine Canny and Bruce Lessey discuss the known and putative functions of lipoxin A_4 (LXA_4), derived from arachidonic acid, in the endometrium. Specifically, they describe its role in the pathogenesis of endometriosis, an inflammatory condition that is a major cause of infertility and pregnancy loss. See page 439

PRRs in intestinal inflammation

Masayuki Fukata and Moshe Arditi provide a comprehensive analysis of the role of various pattern-recognition receptors (PRRs) in maintaining normal intestinal homeostasis. In addition, they explain how abnormal PRR signaling may contribute to intestinal inflammation and cancer development. See page 451



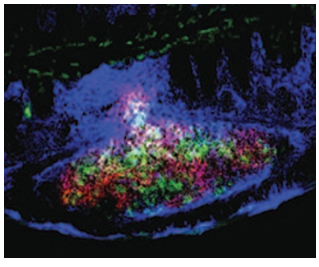
p 498

Mononuclear phagocytes in lung infection

Martin Guilliams and co-workers discuss the role of dendritic cell and macrophage populations in pulmonary infections, with a focus on influenza virus and mycobacterial tuberculosis. See page 464

Lung responses to dsRNA

Paul Harris and colleagues describe the molecular changes that occur in the airways of mice in response to double-stranded RNA (dsRNA) in a model of airway inflammation. They then relate these to changes that occur in patients with chronic obstructive pulmonary disease. See page 474



p 511

HIF-1α and IL-10

Marie Toussaint and colleagues show that hypoxia-inducible factor 1α is important for interleukin-10 secretion by interstitial macrophages, which results in inhibition of allergen-induced T helper type 2 response in the lung. See page 485

Monocytes' fate in the colon

Calum Bain and colleagues found that blood monocytes differentiate into distinct functional cell populations in the colon along a continuum from monocytes to $CX3CR1^{hi}$ macrophages. See page 498

Development of colonic patches and SILT

Antonio Baptista and co-workers show that colonic patches and colonic solitary isolated lymphoid tissue (SILT) are distinct lymphoid tissues that can be identified according to anatomical location, developmental time frame, and cellular organization, and that they may have distinct functions. See page 511

Targeting DCs for immunity to *M. tuberculosis*

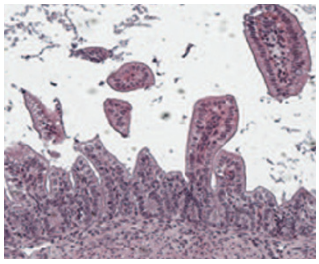
Using a novel vaccine delivery strategy that targeted dendritic cells (DCs), Hui Dong and colleagues immunized mice with *Mycobacterium tuberculosis* ESX antigens. Their results show that the approach provided protection against infection. See page 522

EtxB induces lung Tregs

David Donaldson and fellow scientists found that intranasal administration of *Escherichia coli* heat-labile enterotoxin B subunit (EtxB) protected against airway inflammation in mice by inducing development of $CD4^+$ T regulatory cells (Tregs). See page 535

Antenatal ureaplasma infection and NEC

Tim Wolfs and colleagues demonstrate in a sheep model that experimental chorioamnionitis caused by *Ureaplasma parvum* resulted in fetal gut inflammation, impaired intestinal development, and villous atrophy that was dependent on interleukin-1 and has implications for the pathogenesis of necrotizing enterocolitis (NEC). See page 547



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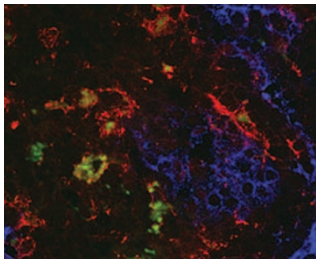
MUC1 and MUC13 regulate inflammation

Yong Sheng and colleagues identified a potential role for the epithelial cell transmembrane mucin glycoproteins MUC1 and MUC13 in regulating intestinal inflammation. See page 557

Chlamydia, IL-13, and airway inflammation

Malcolm Starkey and co-workers present evidence indicating that early-life *Chlamydia* respiratory infection reduces production of interleukin (IL)-13Rα2, leading to enhanced IL-13 signaling and the development of severe allergic airway disease. See page 569



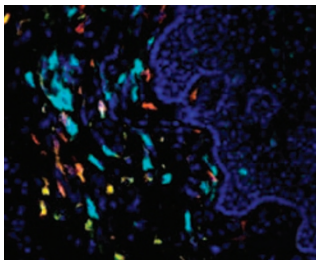
p 580

TIM-4 mediates respiratory tolerance

Lee Albacker *et al*. describe a central role for TIM-4-mediated clearance of antigen-specific T cells by lymph node medullary macrophages in regulating respiratory tolerance. See page 580

Loss of intestinal iNKT cells during HIV infection

Francisco Ibarrondo and colleagues observed a preferential depletion of regulatory CD4-expressing invariant receptor natural killer T (iNKT) cells in the intestine following HIV infection. See page 591



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Enhanced transfer colitis in C57BL/10 RAG-deficient mice

Vassilis Valatas and colleagues show that the genetic susceptibility of the C57BL/10 RAG-deficient mouse strain to transfer colitis depends on interleukin-23-mediated dysregulation of effector and regulatory-T-cell differentiation in mesenteric lymph nodes. See page 601

Vaccine imprinting of innate immunity

Mangalakumari Jeyanathan and co-workers found that different viral vaccine prime-boost strategies can affect vaccine-induced protective immunity by imprinting innate immune cells. See page 612

Human vaginal dendritic cells and macrophages

Dorothée Duluc and colleagues demonstrate functional diversity among human vaginal mononuclear phagocyte populations. See page 626

IRE1β is essential for airway mucus production

Mary Martino and colleagues demonstrate that the endoplasmic reticulum stress transducer inositol–requiring enzyme 1β (IRE1β) is required for airway epithelial cell mucin production. See page 639