

# NATURE REVIEW

REVIEWS AND COMMENT FROM THE NATURE PUBLISHING GROUP



▲ **Bridging innate and adaptive immunity** Focus in *Nature Immunology* October (2004)

These five articles describe the interplay between the innate and adaptive immune responses. Major players in innate immunity — the Toll-like receptors, the complement cascade and natural killer cells — are featured in this overview.



▲ **Regulatory T cells: friend or foe in immunity to infection?**

Mills, K. H. G.

*Nature Reviews Immunology*  
November (2004)

This review discusses the role of regulatory T (Tr) cells in infectious disease. By suppressing immune responses, Tr cells can reduce the damage caused by pathogen-induced immunopathology. But these cells might also harm the host by interfering with protective immune responses.

● **Head to head**

Macilwain, C.

*Nature* 16 September (2004)

**Nature joins the fray in the run-up to the US election** by comparing the opinions of the presidential candidates George W. Bush and John Kerry on science-related issues ranging from BSE to bioweapons.

● **Evolution: A is for adaptation**

Boeke, J. D.

*Nature* 23 September (2004)

This News and Views piece explains how the *Bordetella*-infecting virus BPP-1 uses reverse-transcriptase to generate diversity in a region of the genome that encodes a viral *Bordetella*-binding protein.

● **Lung immunity: necessity is the mother of induction**

Corbett, M. & Kraehenbuhl, J.-P.

*Nature Medicine* October (2004)

This News and Views article highlights a recent finding that adult mice generate pulmonary lymphoid structures *de novo* in response to infection with influenza virus. This lymphoid tissue mediates adaptive immune responses, and an understanding of induction signals could facilitate the development of aerosol vaccines to pathogens such as influenza and SARS.

▶ **Tackling the challenges of interdisciplinary bioscience**

McCarthy, J.

*Nature Reviews Molecular Cell Biology*, November (2004)

● **Cell biology: sight at the end of the tunnel**

Horwich, A.

*Nature* 30 September (2004)

The crystal structure and the proposed mechanism of action of trigger factor — an *Escherichia coli* bacterial chaperone — is outlined in this News and Views article. Unresolved questions about chaperone mechanisms are discussed.

● **Are microbes at the root of a solution to world food production?**

Morrissey, J. P., Dow, J. M., Mark, G. L. & O'Gara, F.

*EMBO Reports* October (2004)

● **Retroviral restriction by APOBEC proteins**

Harris, R. S. & Liddament, M. T.

*Nature Reviews Immunology*  
November (2004)

This review focuses on the mechanisms of (retro)viral restriction used by APOBEC proteins — components of the vertebrate innate immune response. It highlights similarities between this immune response and the response induced by AID, a probable DNA mutator that generates antibody gene diversification.

