REVIEWS AND COMMENT FROM THE NATURE PUBLISHING GROUP



▲ Epidemic cycling and immunity. Grenfell, B. & Bjørnstad, O. *Nature* 27 January (2005). This News and Views article discusses a recent study showing that the ability of individuals to develop long-term immunity after infection with *Treponema pallidum* (the causative agent of syphilis) influences the oscillating pattern of syphilis epidemics.



▲ The last flag unfurled? A new immunoglobulin isotype in fish expressed in early development. Flajnik, M. F. *Nature Immunology* March (2005) • A Toll-like trigger for autoimmune disease. Bach, J.-F.

Nature Medicine February (2005) In this News and Views article, Jean-François Bach discusses new data indicating that Toll-likereceptor signals can initiate the onset of disease in a mouse model of type 1 diabetes.

• Integrase inhibitors to treat HIV/AIDs.

Pommier, Y., Johnson, A. & Marchand, C. *Nature Reviews Drug Discovery* March (2005)

This Review describes the rationale for developing integrase inhibitors for the treatment of HIV infection and prevention of AIDS.

 Antimicrobial peptides: pore formers or potent metabolic inhibitors in bacteria? Brogden, K. A. *Nature Reviews Microbiology*

March (2005) Antimicrobial peptides are produced by many species, including invertebrates, plants and animals. The many different models of antimicrobial-peptide activity used to define the peptide-induced killing of microorganisms are summarized in this Review article.

 The evolving role of natural products in drug discovery. Koehn, F. E. & Carter, G. T. *Nature Reviews Drug Discovery* March (2005)

• Induction and suppression of RNA silencing: insights from viral infections.

Voinnet, O. *Nature Reviews Genetics* March (2005)

RNA silencing is an important antiviral defence mechanism in plants and insects. Many viruses have evolved intricate strategies to evade this host response, and as discussed in this Review, studying this host-virus interface has provided new insight into the mechanisms of RNA silencing.

Dendritic cells giveth and taketh away.

Abbas, A. K. & Sharpe, A. H. *Nature Immunology* March (2005)

PD1 and CTLA4 are inhibitory receptors expressed by T cells. As discussed in this News and Views article, engagement of these receptors is required if resting dendritic cells are to induce T-cell tolerance.

