



▲ Focus Issue on Toll-like receptor signalling. *Nature Reviews Immunology* July (2004). Includes a free poster called Toll-like receptor signalling by Luke A. J. O'Neill.

● **Hsp90 invades the outside.**
Picard, D.
Nature Cell Biology June (2004)
The intracellular function of the molecular chaperone heat-shock protein 90 (HSP90) is well known. This News and Views article describes a new extracellular role for HSP90 in promoting maturation of the metalloproteinase MMP2 and aiding cancer cell migration.



▼ **Molecular medicine: The writing is on the vessel wall.**
Contag, C.H. & Bachmann, M. H.
Nature 10 June (2004)
Looking for a needle in a haystack is never an easy option. This News and Views article highlights the use of subtractive proteomic mapping to identify individual tissue-specific messages evident within blood vessels supplying tumours.

● **Unravelling the general properties of siRNAs: strength in numbers and lessons from the past.**
Hall, J.
Nature Reviews Genetics July (2004)

● **TORward AKTually useful mouse models.**
Mellinghoff, I. K. & Sawyers, C. L.
Nature Medicine June (2004)
This News and Views article discusses how mouse models of tumorigenesis are being used to evaluate new cancer drug treatments. The authors also highlight the potential of the positron-emission tomography tracer [¹⁸F]2-fluoro-deoxy-D-glucose to act as a marker for TOR activity in tumours.

● **Ageing: Mice and Mitochondria**
Martin, G. M. & Loeb, L. A.
Nature 27 May (2004)
Mitochondrial DNA accumulates mutations as cells age. This News and Views article discusses recent evidence that damage within mitochondrial DNA is the cause rather than the effect of ageing and can lead to increased levels of reactive oxygen species and genomic mutation.

● **Nitrate, bacteria and human health.**
Lundberg, J. O., Weitzberg, E., Cole J. A. & Benjamin, N.
Nature Reviews Microbiology July (2004)

▼ **Fine-tuning PU.1.**
Stirewalt, D. L.
Nature Genetics June (2004)
Levels of expression of the transcription factor PU.1 determine the path of haematopoietic cell differentiation. If PU.1 expression levels are reduced below a crucial level in mice, an aggressive form of acute myelogenous leukaemia develops. This News and Views article discusses the molecular mechanisms behind this.

