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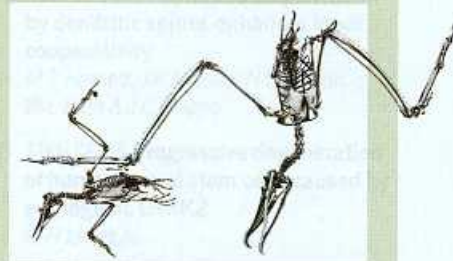
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535 REPRODUCTIVE BIOLOGY

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Depression brought to light

Direct effects of abnormal light-dark cycle on mood and learning

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538 MICROBIOLOGY

A piece of the methane puzzle

Methane oxidation and sulphate reduction by marine-sediment archaea

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539 LOW-TEMPERATURE PHYSICS

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547 NEUROSCIENCE

Hippocampal-cortical interaction during periods of subcortical silence

N K Logothetis et al.

ON THE COVER

Leading edge

A stone-tool technology from South Africa, dating back some 71,000 years, could have provided heat-treated bladelets for use in spear-throwers.

Such weapons may have been pivotal to the success of modern humans as they left Africa and encountered Neanderthals.

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618 IMMUNOLOGY

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R Mathew et al.

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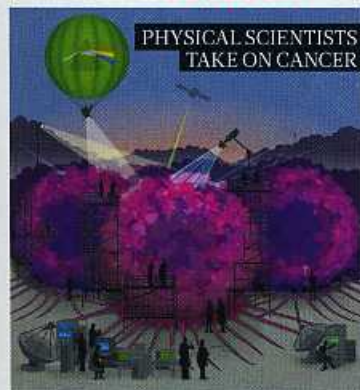
Structure and mechanism of a bacterial sodium-dependent dicarboxylate transporter

R Mancusso, G G Gregorio, Q Liu & D-N Wang

COVER ART BY ERICH FISHER

PHYSICAL SCIENTISTS TAKE ON CANCER

natureOUTLOOK



PHYSICAL SCIENTISTS
TAKE ON CANCER



Bringing new tools
to the fight

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S50 ONCOLOGY

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Different scientific disciplines are bringing fresh perspectives to cancer research

S52 MEGADATA

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One new partnership is making sense of reams of biological information to diagnose cancer

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Finding cancer's first principles

Robert Gatenby says genomic data just get in the way

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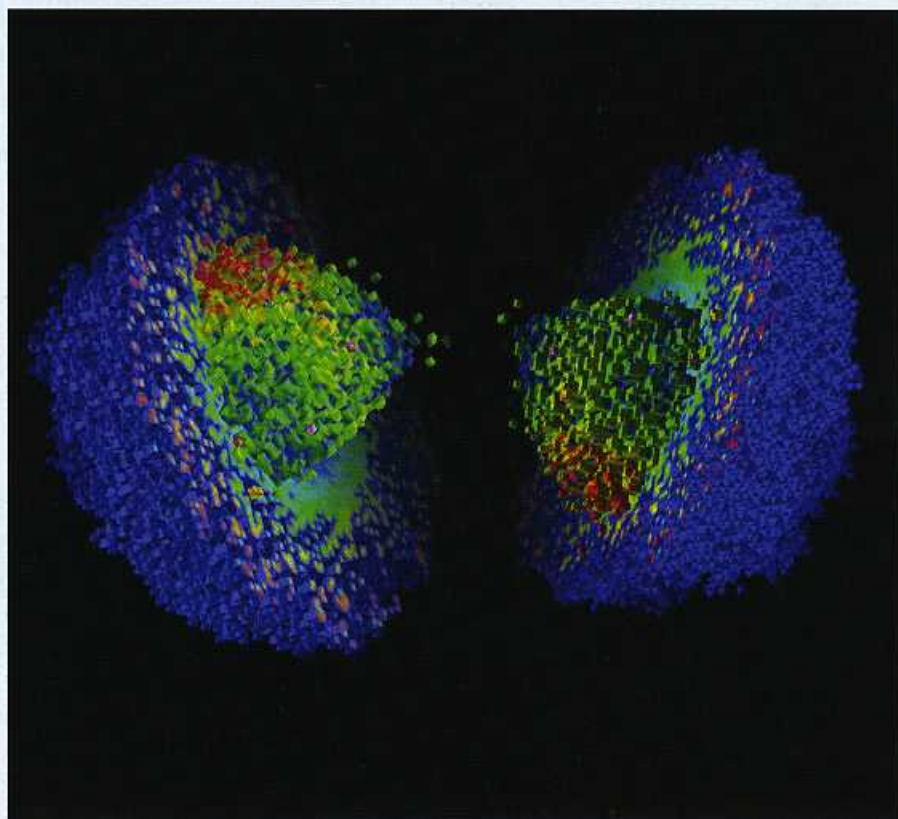
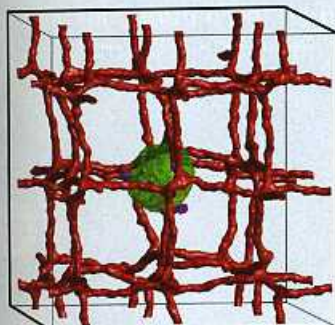
The forces of cancer

The work of characterizing the physical and biological changes in tumours is just beginning

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Nanobots deliver drugs directly to tumour cells



Mathematical models can help visualize the inside of a tumour (page S66).

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