

## NEWS

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By C. Pala

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By E. Hand

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Sustained size reduction was essential for the origin of birds and avian flight

By M. J. Benton

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#### 510 A GEM OF A QUANTUM TELEPORTER

Diamond-based quantum teleportation works every time

By M. Atatüre and J. J. L. Morton

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#### 511 AN EPIGENETIC WINDOW INTO THE PAST?

DNA damage in ancient genomes may provide insight into past regulatory changes in humans and other species

By L. Orlando and E. Willerslev

#### 513 MORE PAIN; LESS GAIN

Persistent pain changes a neural circuit and reduces willingness to work for food  
By H. L. Fields

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Pulsations from young stars provide a new chronometer for stellar evolution

By S. Stahler and F. Palla

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A Turing network controls the periodic pattern of fingers and toes during development  
By A. Zuniga and R. Zeller

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By R. M. Maizels and W. C. Gause

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Zero hunger

By M. S. Swaminathan

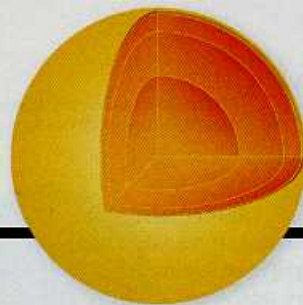
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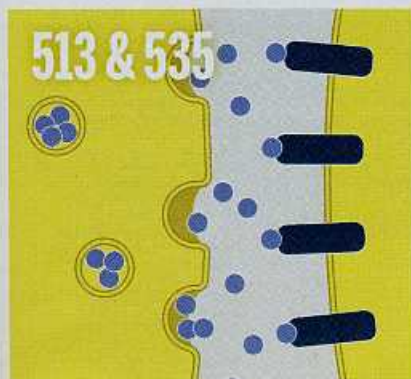


## 514 & 550

A glimpse into the development of young stars

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## RESEARCH



### IN BRIEF

526 From *Science* and other journals

### REVIEW

#### 529 INTERNEURONS

Fast-spiking, parvalbumin<sup>+</sup> GABAergic interneurons: From cellular design to microcircuit function *H. Hu et al.*

REVIEW SUMMARY; FOR FULL TEXT: [dx.doi.org/10.1126/science.1255263](http://dx.doi.org/10.1126/science.1255263)

### RESEARCH ARTICLES

#### 531 MOBILE DNA IN CANCER

Extensive transduction of nonrepetitive DNA mediated by L1 retrotransposition in cancer genomes *J. M. C. Tubio et al.*

RESEARCH ARTICLE SUMMARY; FOR FULL TEXT: [dx.doi.org/10.1126/science.1251343](http://dx.doi.org/10.1126/science.1251343)

#### 532 QUANTUM INFORMATION

Unconditional quantum teleportation between distant solid-state quantum bits *W. Pfaff et al.*

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#### 535 CHRONIC PAIN

Decreased motivation during chronic pain requires long-term depression in the nucleus accumbens *N. Schwartz et al.*

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Interface engineering of highly efficient perovskite solar cells *H. Zhou et al.*

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Highly active copper-ceria and copper-ceria-titania catalysts for methanol synthesis from CO<sub>2</sub> *J. Graciani et al.*

#### 550 ASTEROSEISMOLOGY

Echography of young stars reveals their evolution *K. Zwintz et al.*

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#### 554 NOVAE

Fermi establishes classical novae as a distinct class of gamma-ray sources *The Fermi-LAT Collaboration*

► PODCAST

#### 558 QUANTITATIVE SOCIAL SCIENCE

A network framework of cultural history *M. Schich et al.*

#### 562 DINOSAUR EVOLUTION

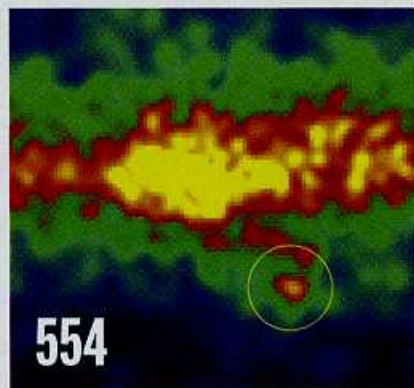
Sustained miniaturization and anatomical innovation in the dinosaurian ancestors of birds *M. S. Y. Lee et al.*

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#### 566 MODELING DIGITS

Digit patterning is controlled by a Bmp-Sox9-Wnt Turing network modulated by morphogen gradients *J. Raspopovic et al.*

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#### 570 HIV LATENCY

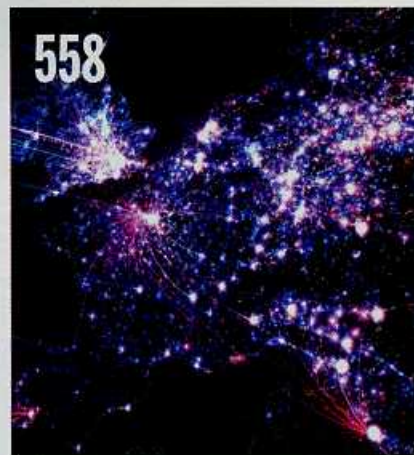
Proliferation of cells with HIV integrated into cancer genes contributes to persistent infection *T. A. Wagner et al.*

### COINFECTION

573 Helminth infection reactivates latent  $\gamma$ -herpesvirus via cytokine competition at a viral promoter *T. A. Reese et al.*

578 Virus-helminth coinfection reveals a microbiota-independent mechanism of immunomodulation *L. C. Osborne et al.*

► PERSPECTIVE P. 517



### ON THE COVER



Colorized scanning electron micrograph of a dog roundworm (*Toxocara canis*). Intestinal parasites infect more than 1 billion people worldwide and cause serious morbidity,

particularly in the developing world. In mice, intestinal parasites also dampen their host's immunity to viruses, causing latent viruses to reactivate and impeding antiviral defenses. See pages 517, 573, and 578.

Image: © Eye of Science/Science Source

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