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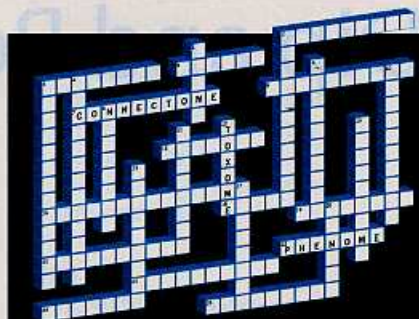
'Sustainability' is being touted as a career choice — but there are doubters

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ON THE COVER

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Three letters are running rampant through biology, but which of the 'omes justify their existence? **PAGE 416**  
(see bottom of page for crossword answers)

#### 409 POLICY

MIT physicist Ernest Moniz tipped to be next US energy secretary

#### 410 HEALTH

Revised guidelines likely to move away from stringent cholesterol limits

#### 411 CONSERVATION

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#### 413 REGENERATIVE MEDICINE

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Circular RNAs put geneticists in a spin

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Engineer-businessman Norm Augustine is a major cog in the US science-policy machine

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Marjory S Blumenthal

The US National Academy of Sciences needs to be quicker to offer its advice

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Daphne Bavelier & Richard J Davidson

Video games can enhance brain function, so let's make the most of them

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#### 427 URBAN PLANNING

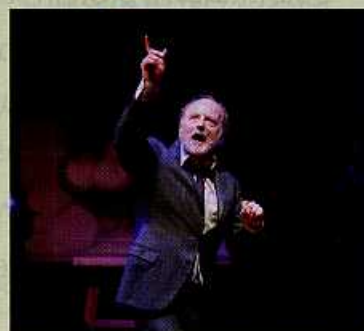
##### Monumental knock-offs

Mike Davis

## ARTS

## Stargazing

Philip Ball gets to grips with *A Life of Galileo* **PAGE 428**



#### 429 BOOKS IN BRIEF

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430 Genius still in demand / Inefficient energy efficiency / Genetic privacy / Antifragility defined

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#### 432 ASTROPHYSICS

##### Black holes in a spin

Spin rate of the black hole at the centre of spiral galaxy NGC 1365  
*Christopher S Reynolds*

SEE LETTER P.449

#### 433 VIROLOGY

##### Phages hijack a host's defence

A functional CRISPR/Cas system in *V. cholerae* bacteriophages  
*Manuela Villion & Sylvain Moineau*

SEE LETTER P.489

#### 434 SPEECH SCIENCE

##### Tuned to the rhythm

Origins of human speech may lie in rhythmic primate facial displays  
*W Tecumseh Fitch*

#### 435 ENVIRONMENTAL SCIENCE

##### The shape of nitrogen to come

The impact of human activity on the nitrogen cycle in China  
*Mark A Sutton & Albert Bleeker*

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#### 437 NUTRITION

##### When guests turn hostile

The role of human gut microbiota in severe acute malnutrition  
*Ruth E Ley*

#### 438 PARASITOLOGY

##### Rejuvenation through stem cells

Adult stem cells may contribute to schistosome pathogenicity  
*Edward J Pearce* SEE LETTER P.476

#### 439 CANCER

##### Stress mixes chromosomes

DNA-replication errors cause chromosomal abnormalities in cancer cells  
*Aniek Janssen & René H Medema*

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### ARTICLES

#### 443 BIOPHYSICS Crystal structure of the entire respiratory complex I

*R Baradaran, J M Berrisford, G S Minhas & L A Sazanov*

### LETTERS

#### 449 ASTRONOMY A rapidly spinning supermassive black hole at the centre of NGC 1365

*G Risaliti et al.* SEE N&V P.432

#### 452 ASTRONOMY A sub-Mercury-sized exoplanet

*T Barclay et al.*

#### 455 PHYSICS Giant osmotic energy conversion measured in a single transmembrane boron nitride nanotube

*A Siria et al.*

#### 459 ENVIRONMENTAL SCIENCE Enhanced nitrogen deposition over China

*X Liu et al.* SEE N&V P.435

#### 463 EVOLUTION Evolutionary rescue from extinction is contingent on a lower rate of environmental change

*H A Lindsey, J Gallie, S Taylor & B Kerr*

#### 468 EVOLUTION Specialized appendages in fuxianhuids and the head organization of early euarthropods

*J Yang, J Ortega-Hernández, N J Butterfield & X-g Zhang*

#### 472 NEUROSCIENCE High salt recruits aversive taste pathways

*Y Oka, M Butnaru, L von Buchholtz, N J P Ryba & C S Zuker*

#### 476 MICROBIOLOGY Adult somatic stem cells in the human parasite *Schistosoma mansoni*

*J J Collins III et al.* SEE N&V P.438

#### 480 SYSTEMS BIOLOGY Dynamics extracted from fixed cells reveal feedback linking cell growth to cell cycle

*R Kafri et al.*

#### 484 CANCER G1 activation by atypical protein kinase C $\alpha$ regulates the growth of basal cell carcinomas

*S X Atwood, M Li, A Lee, J Y Tang & A E Oro*

#### 489 MICROBIOLOGY A bacteriophage encodes its own CRISPR/Cas adaptive response to evade host innate immunity

*K D Seed, D W Lazinski, S B Calderwood & A Camilli* SEE N&V P.433

#### 492 CANCER Replication stress links structural and numerical cancer chromosomal instability

*R A Burrell et al.* SEE N&V P.439

#### 497 MOLECULAR BIOLOGY Activating RNAs associate with Mediator to enhance chromatin architecture and transcription

*F Lai et al.*

#### 502 CELL BIOLOGY A two-step mechanism for TRF2-mediated chromosome-end protection

*K Okamoto et al.*

#### 506 CORRIGENDUM Comprehensive genomic characterization defines human glioblastoma genes and core pathways

*The Cancer Genome Atlas Research Network*

#### 506 CORRIGENDUM Mesoangioblast stem cells ameliorate muscle function in dystrophic dogs

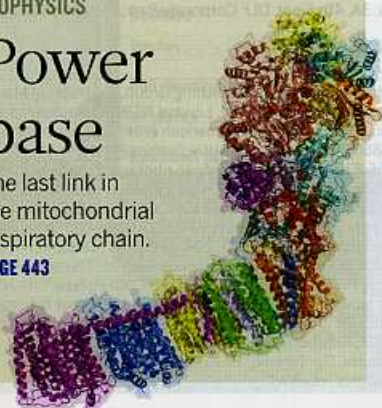
*M Sampaolesi et al.*

### BIOPHYSICS

## Power base

The last link in the mitochondrial respiratory chain.

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### EVOLUTION

## Heads down

How early arthropods lost their head adornments. PAGE 468