appliedbiosystems 2T/17100

26 November 2015 / Vol 527 / Issue No 7579

PARIS CLIMATE TALKS

409 The way forward is through Paris Once a solid agreement is made, the world must get to work

WORLD VIEW

411 A 'perfect' agreement in Paris is not essential Johan Rockström Success will be admission that incremental change is not enough

NEWS

418 Pledges raise hopes ahead of climate talks Commitments offer hope for binding treaty

419 Green Climate Fund faces slew of criticism

Operations of UN mechanism come under fire

FEATURES

425 All together now

A special issue looks at the path to Paris and beyond

427 The fragile framework

A comic chronicles the quest for a global climate treaty

436 The 2°C dream

Keeping warming under the target will require heroic efforts

COMMENT

439 After the talks

David G Victor & James P Leape Hold businesses to their decarbonization promises

BOOKS & ARTS

443 The launch of Spaceship Earth

Adam Rome Five books that triggered the sustainability movement



nature.com/ parisclimate COVER ILLUSTRATION BY DAVID PARKINS

THIS WEEK

EDITORIALS

410 INTELLECTUAL PROPERTY

Built on trust

Handshakes are not always the best way to agree to a deal

410 BRAZIL

Drugs on demand

Court should uphold decision to halt distribution of unproven drug

RESEARCH HIGHLIGHTS

412 SELECTIONS FROM THE SCIENTIFIC LITERATURE

Sweet tooth lost / Sea shells see / Toad rescue / Text-mining fracas / Phobos unstable / Bee response to pesticide / Gut microbes trump diets

SEVEN DAYS

414 THE NEWS IN BRIEF

Australia fines whalers / Rare rhino dies / New Ebola cases in Liberia / Pfizer and Allergan to merge / Panel calls for WHO reforms

TECHNOLOGY FEATURE

545 IMMUNOLOGY

Antibody anarchy: a call to order Awareness of antibody limitations will help to clarify results

NEWS IN FOCUS

417 BIOTECHNOLOGY

US government authorizes sale of fast-growing transgenic salmon

Brazilian court restricts access to unproven cancer treatment

421 TIMEKEEPING

Decision to scrap leap second delayed by eight years

422 BIOMEDICAL RESEARCH

NIH preserves data from retired chimps in online database



ov tenov si sinem

CAREERS

553 MENTAL HEALTH

The mindful way

Some institutions embrace the idea of 'mindfulness', but many remain sceptical

554 TURNING POINT

Personal experience informs Jason Lunden's understanding of autismspectrum disorder

COMMENT

441 MATERIALS

Share corrosion data

Xiaogang Li et al. Open databases will reduce disasters caused by materials failures

445 BOOKS IN BRIEF

CORRESPONDENCE

446 Disability and gene editing / Economics / Trial crowdfunding / Tracking pollution

FUTURES

556 Claimed

S J Rosenstein

natureoutli



S217 Ovarian

cancer: Beyond resistance Could experimental therapies deliver a knockout blow to chemotherapy-





26 NOVEMBER 2015 | VOL 527 | NATURE | 405

CONTENTS

26 November 2015 / Vol 527 / Issue No 7579

RESEARCH

NEW ONLINE

447 Papers published this week at nature.com

NEWS & VIEWS

448 GENOMICS

Acorn worms in a nutshell Whole-genome sequences from two enteropneust species Casey W Dunn SEE ARTICLE P.459

449 CIRCADIAN CLOCKS

A receptor for subtle temperature changes

The protein IR25a acts to synchronize fly circadian clocks to temperature François Rouyer & Abhishek Chatterjee SEE LETTER P.516

451 IMAGING TECHNIQUES

Super-resolution ultrasound
Ultrafast ultrasound enables
visualization of microvessels in rats
Ben Cox & Paul Beard SEE LETTER P.499

452 CELL FATE

Transition loses its invasive edge
Epithelial-to-mesenchymal transition is
not needed for tumour metastasis
Shyamala Maheswaran & Daniel A
Haber SEE ARTICLE P.472 & LETTER P.525

453 EBOLA

Hidden reservoirs

Viral persistence recorded in some survivors of Ebola Jonathan L Heeney

455 PLANETARY SCIENCE

The Moon's tilt for gold
Simulations of the Moon's early orbit
Robin Canup SEE LETTER P.492

466 BLINDNESS

Assassins of eyesight

Risk factors for glaucoma converge on a common molecular cascade Andrew D Huberman & Rana N El-Danaf

ARTICLES

- 459 GENOMICS Hemichordate genomes and deuterostome origins O Simakov et al. SEE N&V P.448
- 466 STEM CELLS A perisinusoidal niche for extramedullary haematopoiesis in the spleen C N Inra et al.
- 472 CANCER Epithelial-to-mesenchymal





PLANT SCIENCES

Water power

'Resurrection' plants show the way to drought tolerant crops. PAGE 508

transition is not required for lung metastasis but contributes to chemoresistance KR Fischer et al. SEE N&V P.452

477 CHEMICAL BIOLOGY Allosteric ligands for the pharmacologically dark receptors GPR68 and GPR65

X-P Huang et al.

LETTERS

- 484 ASTROPHYSICS Extremely metal-poor stars from the cosmic dawn in the bulge of the Milky Way L M Howes et al.
- 488 ASTROPHYSICS Ubiquitous time variability of integrated stellar populations C Conroy, P G van Dokkum & J Choi
- 492 PLANETARY SCIENCE Collisionless encounters and the origin of the lunar inclination K Pahlevan & A Morbidelli SEE N&V P.455
- 495 MATERIALS SCIENCE Type-II Weyl semimetals

 A A Soluyanov et al.
- 499 IMAGING TECHNIQUES Ultrafast
 ultrasound localization microscopy
 for deep super-resolution vascular
 imaging
 C Errico et al. SEE N&V P.451
- 503 MATERIALS CHEMISTRY Extra adsorption

- and adsorbate superlattice formation in metal-organic frameworks *H S Cho* et al.
- 508 PLANT SCIENCES Single-molecule sequencing of the desiccationtolerant grass Oropetium thomaeum R VanBuren et al.
- 512 NEUROSCIENCE Sweet and bitter taste in the brain of awake behaving animals Y Peng et al.
- 516 NEUROSCIENCE Drosophila Ionotropic Receptor 25a mediates circadian clock resetting by temperature C Chen et al. SEE N&V P.449
- 521 MICROBIOLOGY Fungal pathogen uses sex pheromone receptor for chemotropic sensing of host plant signals D Turrà, M El Ghalid, F Rossi & A Di Pietro
- 525 CANCER Epithelial-to-mesenchymal transition is dispensable for metastasis but induces chemoresistance in pancreatic cancer X Zheng et al. SEE N&V P.452
- 531 VIROLOGY In situ structures of the segmented genome and RNA polymerase complex inside a dsRNA virus

 X Zhang et al.
- 535 STRUCTURAL BIOLOGY Foreign DNA capture during CRISPR-Cas adaptive immunity

 J K Nuñez et al.
- 539 STRUCTURAL BIOLOGY Endoperoxide formation by an α-ketoglutarate-dependent mononuclear non-haem iron enzyme W Yan et al.
- ichthyosauriform with a short snout from the Lower Triassic of China R Motani et al.
- 544 CORRIGENDUM Influence maximization in complex networks through optimal percolation F Morone & H A Makse
- 544 RETRACTION Non-blinking semiconductor nanocrystals X Wang et al.