

CONTENTS

24 JUNE 2016 • VOLUME 352 • ISSUE 6293



1518

Why microbes matter for coral reefs

1508



A human magnetic sense?

NEWS

IN BRIEF

1498 News at a glance

IN DEPTH

1500 CHINA OVERTAKES U.S. SUPERCOMPUTING LEAD

A new machine propels China to first place in combined supercomputing power *By R. F. Service*

1501 HOW A 'GODZILLA' EL NIÑO SHOOK UP WEATHER FORECASTS

Departing climate event left fires, drought, and questions *By E. Kintisch*

1502 BLIND CAVE FISH MAY PROVIDE INSIGHTS INTO HUMAN HEALTH

Cave adaptations are connected to diabetes, eye problems, and other conditions that afflict people *By E. Pennisi*

1503 STEP ASIDE, E. COLI

Can a faster-growing microbe replace lab favorite? *By B. Panko*

1504 HIGH-PROFILE CANCER REVIEWS TRIGGER CONTROVERSY

IARC reports create mostly confusion, scientists say *By K. Kupferschmidt*

1505 CALIFORNIA APPROVES PUBLICLY FUNDED GUN RESEARCH CENTER

University of California to run \$5 million center that could tap state's extensive database on firearm transfers *By E. Underwood*

1506 BELEAGUERED PHAGE THERAPY TRIAL PASSES ON

Setbacks suggest difficult road for much-needed antibiotic alternatives *By K. Servick*

FEATURES

1508 POLAR EXPLORER

Joe Kirschvink thinks he has found a magnetic sixth sense in humans *By E. Hand*

1510 What and where are the body's magnetometers?

By E. Hand

INSIGHTS

PERSPECTIVES

1514 OUR DRIVERLESS DILEMMA

When should your car be willing to kill you? *By Joshua D. Greene*

► REPORT P. 1573

1515 CONVERTING TO ADAPT

Gut microbiota affect T cell plasticity in the intestinal lining

By M. Colonna and

L. Cervantes-Barragan

► REPORT P. 1581

1517 HOW CLIMATE CHANGE AFFECTS EXTREME WEATHER EVENTS

Research can increasingly determine the contribution of climate change to extreme events such as droughts

By P. Scott

1518 CORALS' MICROBIAL SENTINELS

The coral microbiome will be key to future reef health

By T. D. Ainsworth and R. D. Gates

1520 WHEN THE UNIVERSE BECAME DUSTY

Observations from high-redshift galaxies reveal details of early universe evolution *By C. De Breuck*

► REPORT P. 1559

1521 AVOID THE KINKS WHEN MEASURING MOBILITY

Transistor measurements can overstate organic semiconductor charge carrier mobility

By I. McCulloch et al.

1522 CAPITALIZING ON CONVERGENCE FOR HEALTH CARE

Integrate physical sciences, engineering, and biomedicine

By P. Sharp et al.

BOOKS ET AL.

1524 GMO SAPIENS

By P. Knoepfler,

reviewed by D. Greenbaum

1524 THE END OF SEX AND THE FUTURE OF HUMAN REPRODUCTION

By H. T. Greely,

reviewed by D. Greenbaum

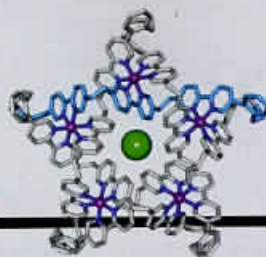
1525 THE LIFE PROJECT

By H. Pearson,

reviewed by A. S. Nejad

Science Staff	1494
AAAS News & Notes	1528
New Products	1594
Science Careers	1595

CONTENTS



1555

A catalytic knot

24 JUNE 2016 • VOLUME 352 • ISSUE 6293

LETTERS

1526 REDUCE, RELEGALIZE, AND RECYCLE FOOD WASTE

By E. K. H. J. zu Ermgassen et al.

1526 BURIAL LAW IMPEDES SCIENTIFIC DISCOVERY

By S. Cachel

1526 MODELING THE EFFECTS OF CLIMATE ENGINEERING

By D. Keith et al.

1527 TECHNICAL COMMENT ABSTRACTS

RESEARCH

IN BRIEF

1530 From *Science* and other journals

REVIEW

1533 MICROBIOTA

Childhood undernutrition, the gut microbiota, and microbiota-directed therapeutics L. V. Blanton et al.

REVIEW SUMMARY; FOR FULL TEXT: dx.doi.org/10.1126/science.aad9359

RESEARCH ARTICLES

1534 DNA NANOTECHNOLOGY

Designer nanoscale DNA assemblies programmed from the top down R. Veneziano et al.

RESEARCH ARTICLE SUMMARY; FOR FULL TEXT: dx.doi.org/10.1126/science.aaf4388

1535 INNATE IMMUNITY

A sentinel goblet cell guards the colonic crypt by triggering Nlrp6-dependent Muc2 secretion

G. M. H. Birchenough et al.

1542 STRUCTURAL BIOLOGY

Atomic structure of Hsp90-Cdc37-Cdk4 reveals that Hsp90 traps and stabilizes an unfolded kinase K. A. Verba et al.

1547 QUANTUM SIMULATION

Exploring the many-body localization transition in two dimensions

J.-y. Choi et al.

REPORTS

1552 QUANTUM PHYSICS

Quantum phase magnification O. Hosten et al.

1555 ORGANIC CHEMISTRY

Allosteric initiation and regulation of catalysis with a molecular knot

V. Marcos et al.

1559 DISTANT GALAXIES

Detection of an oxygen emission line from a high-redshift galaxy in the reionization epoch A. K. Inoue et al.

► PERSPECTIVE P. 1520

1562 QUANTUM INFORMATION

Single-qubit gates based on targeted phase shifts in a 3D neutral atom array

Y. Wang et al.

1565 NANOMATERIALS

Polyelemental nanoparticle libraries P.-C. Chen et al.

1570 NEURODEVELOPMENT

Reprogramming of avian neural crest axial identity and cell fate

M. Simoes-Costa and M. E. Bronner

1573 ETHICS

The social dilemma of autonomous vehicles J.-F. Bonnefon et al.

► PERSPECTIVE P. 1514

1576 PROSTATE DEVELOPMENT

Identification of an NKX3.1-G9a-UTY transcriptional regulatory network that controls prostate differentiation

A. Dutta et al.

1581 MUCOSAL IMMUNOLOGY

Tissue adaptation of regulatory and intraepithelial CD4⁺ T cells controls gut inflammation T. Sujino et al.

► PERSPECTIVE P. 1515



1586 NEUROGENOMICS

Neuronal subtypes and diversity revealed by single-nucleus RNA sequencing of the human brain

B. B. Lake et al.

1590 BIOCHEMISTRY

Synthetic evolutionary origin of a proofreading reverse transcriptase

J. W. Elllefson et al.

DEPARTMENTS

1497 EDITORIAL

Fast horses By Marcia McNutt

► PODCAST

1606 WORKING LIFE

A winding path to satisfaction

By Sarah Fankhauser

ON THE COVER



Artist's interpretation of ultracold atoms trapped in a disordered two-dimensional lattice formed by laser light. Researchers observed a sudden arrest of the quantum spreading of atoms through single-atom-resolved snapshots, indicating an unconventional localized phase of matter. Such a phase defies a traditional description through statistical physics, posing new challenges to physicists. See page 1547. Image: C. Bickel/Science

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