EDITORIALS
5 EPIDEMICS
Viral complacency
Political and financial commitments must not ebb as outbreaks end

5 NUCLEAR SECURITY
Safety in neutrons
Governments should pick up the pace to secure or eliminate nuclear materials

6 MENTAL HEALTH
Mind matters
It is time to create specific targets for tackling mental illnesses

WORLD VIEW
7 Recognize the value of social science
Andrew Webster
A new professional association will aim to foster good practice

RESEARCH HIGHLIGHTS
8 SELECTIONS FROM THE SCIENTIFIC LITERATURE
Plug-and-play drugmakers / White dwarf with oxygen atmosphere / Wild-dog trackers

SEVEN DAYS
10 THE NEWS IN BRIEF
Ebola no longer an emergency / Gorilla numbers plummet / GSK improves drug access / New beam for laser facility

CAREERS

137 DISABILITY AWARENESS
The fight for accessibility
We talk to scientists with disabilities about their struggles and their victories

139 CAREER BRIEFS

NATUREJOBS ADVERTISING FEATURE
Spotlight on bioinformatics

THIS WEEK

NEWS IN FOCUS

ON THE COVER
Mental health
Turning global awareness into global action

PAGES 6, 28 & 25

13 POLITICS
Trump rhetoric worries scientists

14 COSMOLOGY
New detectors to allow best test of one dark-matter signal

16 PUBLIC HEALTH
Fetal tissue crucial to probing link between Zika and birth defects

17 HYDROLOGY
NASA uses aeroplanes to track snow

18 NEUROSCIENCE
Brain project releases computing tools

18 MARINE BIOLOGY
Negotiations begin to protect high seas

FEATURES

20 GLOBAL MENTAL HEALTH
Pocket psychiatry
Apps to track mental health are flourishing, despite a lack of data on their effectiveness

25 DEVELOPMENT
Action on mental health needs global cooperation
Pamela Y Collins & Shekhar Saxena
Research and delivery must transcend national boundaries

SUNRISE TOPICS
28 PHYSICS
Soundtrack of the Universe
Sheila Rowan

30 METEOROLOGY
The brainstormers
Alan Thorpe

31 ENERGY
Oilman at the peak
Gregor Macdonald

32 NEUROSCIENCE
Listening in on yourself
Douwe Draisma

34 SPACE SCIENCE
The women who launched NASA
Jennifer Light

35 GENETICS
Cotitus defunctus
Loël Andrews

CORRESPONDENCE
37 Plan to use stormwater / Engineering soil / Yardsticks for ecosystem recovery / Cleaner hydropower

FUTURES
142 Choices, in sequential order
Karlo Yeager Rodriguez
NEW ONLINE
39 Papers published this week at nature.com

NEWS & VIEWS
40 STELLAR ASTROPHYSICS
Supernovae in the neighbourhood
Marine deposits and models reveal evidence of near by supernovae
Adrian L Melott SEE LETTERS P.69 & P.73

41 MICROBIOLOGY
Fungus produces a toxic surprise
Candita albicans secretes a toxic peptide called Candidamycin
Aaron P Mitchell SEE ARTICLE P.54

42 ISLAND BIOGEOGRAPHY
Shaped by sea-level shifts
Island biodiversity changes since the Last Glacial Maximum
José María Fernández-Palacios
SEE LETTER P.99

44 CLIMATE SCIENCE
Water’s past revisited to predict its future
A reconstruction of 1,200 years of hydroclimate
Matthew E Kirby
SEE LETTER P.94

45 NEUROSCIENCE
Untangling autism
Dissecting the roles of the Ptchd1 gene in a mouse model of autism
Scott Balkin & Joshua A Gordon
SEE ARTICLE P.98

46 MOLECULAR BIOLOGY
Breaks in the brain
DNA double strand breaks cluster in large genes in neural cells
Thomas W Glover & Thomas E Wilson

PERSPECTIVE
49 BIOGEOCHEMISTRY
Climate-smart soils
K Paustian et al.

ARTICLES
90 NEUROSCIENCE
Thalamic reticular impairment underlies attention deficit in Ptchd1-/- mice
N F Wells, R D Wimmer, L I Schmitt, G Feng & M M Halassa
SEE N&V P.45

94 MICROBIOLOGY
Candidamycin is a fungal peptide toxin critical for mucosal infection
D L Moyes et al.
SEE N&V P.41

99 BIOGEOGRAPHY
Late Quaternary climate change shapes island biodiversity
P Wegele, M J Stolfa, J S Gabel & H Kreft
SEE N&V P.42

103 NEUROSCIENCE
A specific area of olfactory cortex involved in stress hormone responses to predator odours
K Konish et al.

107 STEM CELLS
Derivation and differentiation of haploid human embryonic stem cells
I Sagi et al.

112 CELL BIOLOGY
Mitochondrial ROS regulate thermogenic energy expenditure and selenylation of UCP1
E T Choi et al.

117 IMMUNOLOGY
Lypd6 promotes the segregation of flagellated microbiota and colonic epithelia
K Okumura et al.

122 CARDIOVASCULAR DISEASES
Cerebral cavernous malformations arise from endothelial gain of MEKK3-KLF2/4 signalling
Z Zhou et al.

127 STRUCTURAL BIOLOGY
Structural basis of lenalidomide-induced CK1α degradation by the CRL4CRBN ubiquitin ligase
G Petzold, E S Fischer & N H Thomas

131 STRUCTURAL BIOLOGY
Structural basis of cohesin cleavage by separase
Z Lin, X Luo & H Yu

BIOLOGICAL PHYSICS
About phase
The crystal structures of superconducting H2S and D2S

CONDENSED-MATTER PHYSICS
About phase
The crystal structures of superconducting H2S and D2S

PAGE 81