ILLUMINATING THE BRAIN

INTRODUCTION
1262 Revealing the brain’s molecular architecture The PsychENCODE Consortium

RESEARCH ARTICLES
1264 Integrative functional genomic analysis of human brain development and neuropsychiatric risks M. Li et al.
RESEARCH ARTICLE SUMMARY; FOR FULL TEXT: dx.doi.org/10.1126/science.aat7615
1265 Transcriptome-wide isoform-level dysregulation in ASD, schizophrenia, and bipolar disorder M. J. Gandal et al.
RESEARCH ARTICLE SUMMARY; FOR FULL TEXT: dx.doi.org/10.1126/science.aat8127
1266 Comprehensive functional genomic resource and integrative model for the human brain D. Wang et al.
RESEARCH ARTICLE SUMMARY; FOR FULL TEXT: dx.doi.org/10.1126/science.aat8464
1267 Spatiotemporal transcriptomic divergence across human and macaque brain development Y. Zhu et al.
RESEARCH ARTICLE SUMMARY; FOR FULL TEXT: dx.doi.org/10.1126/science.aat8077
1268 Transcriptome and epigenome landscape of human cortical development modeled in organoids A. Amiri et al.
RESEARCH ARTICLE SUMMARY; FOR FULL TEXT: dx.doi.org/10.1126/science.aat6720

1269 Neuron-specific signatures in the chromosomal connectome associated with schizophrenia risk P. Rajarajan et al.
RESEARCH ARTICLE SUMMARY; FOR FULL TEXT: dx.doi.org/10.1126/science.aat4311
1270 Genome-wide de novo risk score implicates promoter variation in autism spectrum disorder J.-Y. An et al.
RESEARCH ARTICLE SUMMARY; FOR FULL TEXT: dx.doi.org/10.1126/science.aat6576

ON THE COVER
The human brain is the product of myriad molecular and genetic interactions. Here, a neon brain illustration represents individual genetic variability, some of which may lead to disease (denoted by dim or dark segments), as investigated by the PsychENCODE Consortium. This issue sheds light on neurogenetic and epigenetic variation in developing and adult neurotypical brains, as well as in schizophrenia, autism spectrum disorder, and bipolar disorder. See page 1262.

Illustration: V. Altounian/Science

SEE ALSO ▶ SCI. TRANSL. MED. 10.1126/scitranslmed.aat8178 ▶ SCI. TRANSL. MED. 10.1126/scitranslmed.aat6912 ▶ SCI. ADV. 10.1126/sciadv.aav8550 ▶ NEWS STORY P. 1227

NEWS

IN BRIEF
1218 News at a glance

IN DEPTH
1222 IRELAND SLASHES PEAT POWER TO LOWER EMISSIONS
Harvested from drained and denuded bogs, peat is more polluting than coal By E. Toner

1223 TRUMP OFFICIALS MOVE TO LIMIT HUMAN FETAL TISSUE RESEARCH
NIH ordered staff scientists not to procure new tissue By M. Wadman and J. Kaiser

1224 U.N. HIV/AIDS AGENCY ASSAILED FOR CULTURE OF HARASSMENT
Independent panel calls for replacing executive director By J. Cohen

1225 WORRIES ABOUT EBOLA OUTBREAK GROW, DESPITE USE OF VACCINE
DRC conflict hampers effort to track and contain virus By J. Cohen

1226 SPACE LASER TO MAP TREES IN 3D
GEDI data will yield maps of forest carbon and biodiversity By G. Popkin

1227 HUMAN BRAIN SAMPLES YIELD A GENOMIC TROVE
Regulatory DNA take center stage in search for mechanisms of disease By K. Servick ▶ ILLUMINATING THE BRAIN SECTION P. 1262

1228 BIOELECTRONICS THAT VANISH IN THE BODY
Wire-free devices that dissolve could expand the use of electric pulses in medicine By R. F. Service

1229 WHY MODERN HUMANS HAVE ROUND HEADS
Neanderthal DNA points to genes that influence brain By A. Gibbons ▶ PODCAST

1229 CONFERENCES SCORE WELL ON CHILD CARE
Male-dominated disciplines lead the pack By K. Langin

FEATURE
1230 STARRY EYES
NASA is planning four of the largest space telescopes ever. But which one will fly? By D. Clery

INSIGHTS

POLICY FORUM
1236 TRAGEDY REVISITED
▶ EDITORIAL P. 1217; PERSPECTIVE P. 1242; PODCAST

PERSPECTIVES
1242 REIMAGINING THE HUMAN
A human-centric worldview is blinding humanity to the consequences of our actions By E. Crist ▶ EDITORIAL P. 1217; POLICY FORUM P. 1236

1244 PRINTING NANOMATERIALS IN SHRINKING GELS
Photopatterning of reactive sites in gels enables arbitrary patterning of nanoparticles By T. E. Long and C. B. Williams ▶ REPORT P. 1281
1246 DID MAIZE DISPERSAL PRECEDE DOMESTICATION?  
Unraveling the history of maize domesticates reveals a complex journey into South America  
By M. A. Zeder  
▶ REPORT P. 1309

1247 PEANUT ALLERGEN–SPECIFIC ANTIBODIES GO PUBLIC  
Characterizing peanut-specific antibodies may identify targets to treat food allergy  
By H. J. Gould and F. Ramadani  
▶ REPORT P. 1306

1248 CAN WITCHWEED BE WIPED OUT?  
A potent stimulant induces parasitic plant germination that causes it to die  
By H. Bouwmeester  
▶ REPORT P. 1301

1250 ALZHEIMER’S DISEASE: THE RIGHT DRUG, THE RIGHT TIME  
Lessons from failed clinical trials can improve the development of Alzheimer’s disease-modifying therapies  
By T. E. Golde et al.

BOOKS ET AL.

1252 SEARCHING FOR THE SINGULARITY  
An embedded journalist tells the tale of an Earth-sized telescope that could provide the first image of a black hole  
By M. Kleban

1253 UNLOCKING THE SCIENCE OF SUCCESS  
A complexity expert reveals how social networks create recognition and acclaim  
By R. M. D’Souza

1254 A NEW HOPE FOR BEATING BACK CANCER  
Vivid portraits of patients, scientists, and physicians reveal the promise of immunotherapy  
By C. W. Simpkins

LETTERS

1255 SANCTIONING TO EXTINCTION IN IRAN  
By L. Khalatbari et al.

RESEARCH

IN BRIEF

1259 From Science and other journals

RESEARCH ARTICLE

1271 SUPERCONDUCTIVITY  
Revealing hidden spin-momentum locking in a high-temperature cuprate superconductor  
K. Gottlieb et al.

REPORTS

1276 ELECTROCATALYSIS  
Ultralow-loading platinum-cobalt fuel cell catalysts derived from imidazolate frameworks  
L. Chong et al.

1281 3D PRINTING  
3D nanofabrication by volumetric deposition and controlled shrinkage of patterned scaffolds  
D. Oran et al.  
▶ PERSPECTIVE P. 1244

1285 ENZYMOLOGY  
Evolution of a highly active and enantiospecific metalloenzyme from short peptides  
S. Studer et al.

1289 CHEMICAL PHYSICS  
Observation of the geometric phase effect in the H + HD ⇌ H2 + D reaction  
D. Yuan et al.

1293 RADIOCARBON  
Atmospheric 14C/12C changes during the last glacial period from Hulu Cave  
H. Cheng et al.

1297 ARCHAEOLOGY  
1.9-million- and 2.4-million-year-old artifacts and stone tool–cutmarked bones from Ain Boucherit, Algeria  
M. Sahnouni et al.

1301 PLANT SCIENCE  
A femtomolar-range suicide germination stimulant for the parasitic plant Striga hermonthica  
D. Uraguchi et al.  
▶ PERSPECTIVE P. 1248

1306 IMMUNOGENOMICS  
High-affinity allergen-specific human antibodies cloned from single IgE B cell transcriptomes  
D. Croote et al.  
▶ PERSPECTIVE P. 1247

1309 MAIZE DOMESTICATION  
Multiproxy evidence highlights a complex evolutionary legacy of maize in South America  
L. Kistler et al.  
▶ PERSPECTIVE P. 1246

DEPARTMENTS

1215 EDITORIAL  
Wake-up call from Hong Kong  
By V. J. D’Souza

1217 EDITORIAL  
Choices in the climate commons  
By S. Barrett  
▶ POLICY FORUM P. 1236; PERSPECTIVE P. 1242

1318 WORKING LIFE  
Spirals of science  
By Luke A. Schwerdtfeger