<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
<th>Title</th>
<th>Authors</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>REVIEW</td>
<td>How to Think, Say, or Do Precisely the Worst Thing for Any Occasion</td>
<td>D. M. Wegner</td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>BREVIA</td>
<td>Serengeti Birds Maintain Forests by Inhibiting Seed Predators</td>
<td>G. J. Sharam et al.</td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>RESEARCH ARTICLE</td>
<td>Dissociable Components of Rule-Guided Behavior Depend on Distinct Medial and Prefrontal Regions</td>
<td>M. J. Buckley et al.</td>
<td>A card-sorting task shows that three distinct regions of the monkey prefrontal cortex perform distinct cognitive functions.</td>
</tr>
<tr>
<td>58</td>
<td>REPORTS</td>
<td>H₂O at the Phoenix Landing Site</td>
<td>P. H. Smith et al.</td>
<td></td>
</tr>
<tr>
<td>61</td>
<td></td>
<td>Evidence for Calcium Carbonate at the Mars Phoenix Landing Site</td>
<td>W. V. Boynton et al.</td>
<td></td>
</tr>
<tr>
<td>64</td>
<td></td>
<td>Detection of Perchlorate and the Soluble Chemistry of Martian Soil at the Phoenix Lander Site</td>
<td>M. H. Hecht et al.</td>
<td></td>
</tr>
<tr>
<td>68</td>
<td></td>
<td>Mars Water-Ice Clouds and Precipitation</td>
<td>J. A. Whiteway et al.</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td></td>
<td>A Coherent Single-Hole Spin in a Semiconductor</td>
<td>D. Brunner et al.</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td></td>
<td>Successful Conservation of a Threatened Maculinea Butterfly</td>
<td>J. A. Thomas et al.</td>
<td></td>
</tr>
<tr>
<td>83</td>
<td></td>
<td>Meningococcal Type IV Pili Recruit the Polarity Complex to Cross the Brain Endothelium</td>
<td>M. Coureuil et al.</td>
<td>Adhesion of bacteria to cells lining blood vessels in the brain induces them to part and allows pathogen invasion.</td>
</tr>
<tr>
<td>90</td>
<td></td>
<td>Jmd6 Catalyses Lysyl-Hydroxylation of U2AF65, a Protein Associated with RNA Splicing</td>
<td>C. J. Webbey et al.</td>
<td>An oxygenase with an important role in vertebrate development hydroxylates a messenger RNA splicing factor.</td>
</tr>
<tr>
<td>96</td>
<td></td>
<td>Ligand-Gated Chloride Channels Are Receptors for Biogenic Amines in C. elegans</td>
<td>N. Ringstad et al.</td>
<td>An expanded family of receptor channels that bind neurotransmitters in worms might help to explain behavioral effects in humans.</td>
</tr>
<tr>
<td>100</td>
<td></td>
<td>LXR Regulates Cholesterol Uptake Through Idol-Dependent Ubiquitination of the LDL Receptor</td>
<td>N. Zelcer et al.</td>
<td>Cholesterol metabolism is regulated by a signaling pathway that targets the LDL receptor for degradation.</td>
</tr>
</tbody>
</table>
Transmission and Pathogenesis of Swine-Origin 2009 A(H1N1) Influenza Viruses in Ferrets and Mice
T. R. Maines et al.
10.1126/science.1177238

Pathogenesis and Transmission of Swine-Origin 2009 A(H1N1) Influenza Virus in Ferrets
V. J. Munster et al.
Animal experiments compare the dynamics and effects of the virus causing the 2009 flu outbreak to those of seasonal H1N1 flu.
10.1126/science.1177127

The Dynamics of Phenotypic Change and the Shrinking Sheep of St. Kilda
A. Ozgul et al.
Environmental change has led to decreasing body size in a sheep population over 20 years, despite selection for increased size.
10.1126/science.1173668

Radio Imaging of the Very-High-Energy γ-Ray Emission Region in the Central Engine of a Radio Galaxy
The VERITAS Collaboration et al.
Particles are accelerated to very high energies in close proximity to a super-massive black hole.
10.1126/science.1175558

Detection of 16 Gamma-Ray Pulsars Through Blind Frequency Searches Using the Fermi LAT
A. A. Abdo et al.
Most of these identifications correspond to gamma-ray sources long suspected to be pulsars.
10.1126/science.1175113

A Population of Gamma-Ray Millisecond Pulsars Seen with the Fermi Large Area Telescope
A. A. Abdo et al.
These objects appear to share a common emission mechanism with standard gamma-ray pulsars.
10.1126/science.1175113

SCIENCEPODCAST
www.sciencemag.org/multimedia/podcast
Free Weekly Show
Download the 3 July Science Podcast to hear about evidence of water at the Mars Phoenix landing site, how Serengeti birds maintain forests, the origins of nervous systems, and more.

ORIGINSBLOG
blogs.sciencemag.org/origins
A History of Beginnings

SCIENCEINSIDER
blogs.sciencemag.org/scienceinsider
Science Policy News and Analysis

Who Was There Before Us? Paleontologists Reveal Early Life on Earth
M. B. Yaffe
EDITORIAL GUIDE: Challenging Times
The Signal Transduction Knowledge Environment
U. B. Nielsen and A. M. VanHook

PERSPECTIVE: AIMing 2 Detect Foreign DNA
A. M. Krieg
AIM2 is a receptor for cytoplasmic double-stranded DNA and induces the formation of an IL-1β-secreting inflammasome.

PODCAST
U. B. Nielsen and A. M. VanHook
Mathematical modeling of signaling pathways can be used to identify candidate targets for cancer therapies.

GLOSSARY
Find out what ERM, FMN, and LH mean in the world of cell signaling.

SCIENCECAREERS
www.sciencemag.org/career_magazine
Free Career Resources for Scientists
Taken for Granted: An Alternative to the Ph.D. Track
B. L. Benderly
Employment prospects for professional science master’s degree program graduates seem strong.

Fun with Fungi: Mycology Careers
S. Coelho
Mycologists can find career opportunities in areas from academic research to applied agriculture.

Funding News
GrantsNet Staff
The Funding News, now published weekly, provides the latest index of research funding and student support.

Science Policy News and Analysis

Science Policy News and Analysis

Change of address: Allow 4 weeks, giving old and new addresses and 8-digit account number. Postmaster: Send change of address to AAAS, P.O. Box 96378, Washington, DC 20090-6178. Single-copy sales: $10.00 current issue, $15.00 back issue prepaid includes surface postage, bulk rates on request. Authorization to photocopy material for internal or personal use under circumstances not falling within the fair use provisions of the Copyright Act is granted by AAAS to libraries and other users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided that $20.00 per article is paid directly to CCC, 222 Rosewood Drive, Danvers, MA 01923. The identification code for Science is 0036-8075. Science is indexed in the Reader’s Guide to Periodical Literature and in several specialized indexes.