

COGNITION

#### How to Make a Consciousness Meter

Zapping the brain with magnetic pulses while measuring its electrical activity is proving to be a reliable way to detect consciousness

By Christof Koch



NATURAL DISASTERS

## Inside Mount Saint Helens, Scientists Find Clues to Eruption Prediction

From underneath Mount Saint Helens, a new picture of volcanic "plumbing" is emerging, with important clues for predicting deadly eruptions By Steve Olson



CONSERVATION

#### The Trouble with Fish Stocking

## Stocking rivers and lakes with game fish is good for anglers. But it is wreaking ecological havoc

By Richard Conniff



ENVIRONMENT

## Capturing Floodwaters in Wet Years Could Help California Survive Drought Years

New tactics for capturing floods and surviving droughts could help communities across California and the world

By Erica Gies



PHYSICS

# Beautiful Physics: The Search for New Particles at LHCb

The Large Hadron Collider beauty experiment has seen hints of new particles that may point the way toward a higher theory of physics

By Guy Wilkinson



### Bacteria Gang Together in Killer Biofilms, but

#### Scientists Can Disrupt Gang Communications

Biofilms—3-D mats of bacteria—kill as many people as cancer does and fight off antibiotics. Now scientists are turning biofilms' own weapons against them By Karin Sauer

#### A Fantastic Journey through Cosmic Scales

A new, epic voyage through all known scales of reality charts the outer limits of existence, from the edge of the observable universe to the subatomic realm By Caleb Scharf and Ron Miller

#### ONLINE EXCLUSIVES

#### How to Read Old MS Word Files When Word Says

#### You Can't

By David Pogue

#### **DEPARTMENTS**

- FROM THE EDITOR Peering Within: An Introduction to the November Issue
- LETTERS

Readers Respond to the July 2017 Issue

ADVANCES

Are Some Psychiatric Disorders a pH Problem?

- How Much Sacrifice Is Your Reputation Worth?
- What's Next after Creating a Cancer-Prevention Vaccine?
- Microbes Could Recycle Astronauts' Waste to Make Nutrients and Tools
- New Weapons in Humanity's War on Mosquitoes
- Treating Toxins with Tree Microbes
- Drones Peer inside a Volcano
- In Case You Missed It
- Nature-Inspired Antifreeze Molecules Could Keep Organs Fresh Longer
- FORUM

People Are Dying Because of Ignorance, not Because of Opioids

- THE SCIENCE OF HEALTH
  - Strict Targets for Cholesterol, Blood Pressure, and More Don't Always Make Sense
- THE SCIENCE AGENDA

The FDA Needs More Power to Regulate Toxic Chemicals in Cosmetics

• TECHNOFILES

#### How to Fight Format Rot

RECOMMENDED

Da Vinci's Genius, Oliver Sacks on Consciousness and Other New Science Books

• SKEPTIC

Does Success Come Mostly from Talent, Hard Work--or Luck?

- ANTI GRAVITY
- Maryn McKenna's Book Big Chicken Looks at Poultry's Effect on Antibiotic Resistance
- 50, 100 & 150 YEARS AGO

Bolshevik Revolution in Russia and the First World War

• GRAPHIC SCIENCE

School Immunization Laws Are Making Kindergarteners Safer