

## World Changing Ideas 2015

By The Editors

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## Algorithms Read Your Intentions by Tracking Your Eyes

By Rachel Nuwer

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## Microwave-Powered Rockets Would Slash Cost of Reaching Orbit

By Lee Billings

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## One Test Detects Every Vertebrate Virus

By Rachel Nuwer

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## Injectable Probes Could Transform Brain Monitoring

By Seth Fletcher

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## Why Fusion Researchers Are Going Small

By David Biello

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## Why Scientists Are Making Kill Switches for GMOs

By Jennifer Abbasi

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## Cooling Panels Pull Heat from Buildings, Beam It into Space

By Rachel Nuwer

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## Deep Learning Is the A.I. Breakthrough We've Been Waiting For

By Gary Stix

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## How to Watch a Chemical Reaction in Slow Motion

By Jennifer Abbasi

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## Cameras That See around Corners Are Closer Than You Might Think

By Larry Greenemeier

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## The U.S. Started as a Nation of Tinkerers

By Daniel J. Kevles

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## Landmark Articles Highlight *Scientific American's* 170 years

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## What Killed the Dinosaurs

By Stephen Brusatte

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## Behind Tomorrow's Telescopes: A Bitter Rivalry from Yesterday

By Katie Worth

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## Unique Clinic Uses Genomic Findings to Help Patients Immediately

By Kevin A. Strauss

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## Without Government, the Marketplace Will Not Solve Climate Change

By Naomi Oreskes

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### | D E P A R T M E N T S |

#### FROM THE EDITOR

Innovation Celebration: World Changing Ideas, 170 Years of *Scientific American* and Nobel Laureate Authors

#### LETTERS TO THE EDITORS

Readers Respond to "How We Conquered the Planet"

#### ADVANCES

Odd Jobs: Meet Ned the Nose

Snakebite Antivenom Development Is Stuck in the 19th Century--What's Next?

Astronomers Indirectly Spot Neutrinos Released Just 1 Second after the Birth of the Universe

Geologists Confirm Mantle Plumes Generate Volcanic Hotspots

Bats in New Zealand Set Up "Time Shares"

In Case You Missed It: U.S. Navy Limits Sonar Use, First Withdrawal from the Svalbard Global Seed Vault and more!

California Farmers Will Intentionally Flood Their Fields This Winter

Speedy Ebola Test Wins Google Science Fair 2015

Tweets Reveal a Twitter User's Income Bracket

In Israel Kids Cross Streets in Virtual Reality for Safety Science

#### **FORUM**

Meeting a Global Carbon Limit Is Cheaper Than Avoiding One

#### **THE SCIENCE OF HEALTH**

New Nerve Drugs May Finally Prevent Migraine Headaches

#### **THE SCIENCE AGENDA**

A Tax on Carbon Pollution Can Benefit Business

#### **TECHNOFILES**

Navigate the Jungle of Tech Ecosystems

#### **RECOMMENDED**

Book Review: Extreme Earth

Book Review: Pacific

Book Review: Science of the Magical

#### **SKEPTIC**

Why Climate Skeptics Are Wrong

#### **ANTI GRAVITY**

Water Walker Wanders Worldwide

#### **50, 100 & 150 YEARS AGO**

The Flight of the Invisible Airplane, 1915

#### **GRAPHIC SCIENCE**

Men and Women Alter a Home's Bacteria Differently

