

650

Working dogs like Nakita are in short supply.

CONTENTS

12 FEBRUARY 2026 | VOLUME 391 | ISSUE 6786

EDITORIAL

639 Taking a sharp turn

—T. A. Maldonado

NEWS

642 Giant primate research center may become sanctuary

Oregon university votes to explore NIH offer to transform national facility —D. Grimm

644 Projects on silty Himalayan rivers raise alarms

Dredging and mining river sediments can raise flood risks and threaten infrastructure, scientists say —A. Parvaiz

645 RNA comes close to copying itself

Some RNA molecules can create their own mirror images, suggesting similar molecules could have sparked life —R. F. Service
RESEARCH ARTICLE BY E. GIANNI ET AL. 10.1126/SCIENCE.ADT2760

647 Rare, dangerous side effects from COVID-19 vaccines explained

Scientists discover why adenovirus-based shots caused life-threatening blood clots and bleeding in some patients —G. Vogel and K. Kupferschmidt

648 Polar Year plans heat up

Geopolitics cast shadow over preparations for 2032 effort to study poles —R. Stone

FEATURES

650 Building a better working dog

More than half of canines trained to help people with disabilities fail to graduate. Can science help? —D. Grimm

PODCAST

COMMENTARY

PERSPECTIVES

654 Driving forward the restoration of an American icon

Genome-informed breeding and new transformation approaches could improve disease resistance of the American chestnut tree —S. H. Strauss and G. T. Slavov
RESEARCH ARTICLE p. 730

656 Layered interface transports ions swiftly

A hierarchical solid-electrolyte interphase can produce ammonia under industrial operating conditions —C. Ampelli
RESEARCH ARTICLE p. 724

657 Keeping cells fit

Fragments of aberrant cytoplasmic mRNA pair with nuclear RNAs to augment transcription —X. Rambout and L. E. Maquat
RESEARCH SUMMARY p. 687

659 The bottleneck of fat burning

A mitochondrial transport protein promotes carnitine synthesis in mice when fat consumption is needed —A. M. Ramos-Lobo and P. Maechler
RESEARCH SUMMARY p. 688

660 Rest to repair

Neuronal activity exacerbates myelin damage in the acute period after injury —K. Nwangwu and M. Monje
RESEARCH SUMMARY p. 686

POLICY FORUM

662 Using markets to adapt to climate change

Research shows if and when markets can help limit the harms from climate change —S. Greenhill *et al.*

BOOKS ET AL.

665 The elusive nature of consciousness

A writer grapples with neuroscience's hardest problem —N. Block

ON THE COVER



Homogeneous particle formation from gaseous precursors traditionally has been thought to be less favorable at high temperatures. By probing the compositions of atmospheric aerosols down to 3 nanometers during a heat wave, researchers discovered an essential role of carboxylic acids in new particle formation. This illustration depicts their spontaneous self-assembly into supramolecular nanoparticles—a phenomenon that could become more prevalent under a warming climate. See page 685. Illustration: C. Bickel/*Science*; Data: R. Zhang *et al.*, *Science* **391**, eady5192 (2026).

730 Tree breeding
Genomic approaches to accelerate American chestnut restoration
—J. W. Westbrook *et al.*
PERSPECTIVE p. 654

WORKING LIFE

738 The invisible scientist
—A. Trolard

640 *Science* Staff
736 New Products
737 *Science* Careers



666 Imagining the rich lives of invertebrates

A writer's evocative meditations invite readers to consider the often-overlooked creatures on their own terms —B. J. King

LETTERS

667 Endangered Species Act changes threaten reefs

—C. J. Anthony *et al.*

668 Revive Brazil's soy moratorium

—G. Magalhães de Oliveira *et al.*

668 e-Waste trade drives environmental injustice

—L. Peng and C. Jin

REVIEWS

669 Climate adaptation

More than mitigation: The role of forests in climate adaptation
—J. E. Reek *et al.*

RESEARCH

HIGHLIGHTS

679 From *Science* and other journals

RESEARCH SUMMARIES

682 Immunology

Transcription factor Etv3 controls the tolerogenic function of dendritic cells —N. M. Adams *et al.*

683 Host defense

Poxvirus attack of antiviral defense pathways unleashes an effector-triggered NF- κ B response
—B. C. Remick *et al.*

684 Protein interactions

Structural ontogeny of protein-protein interactions
—A. Yang *et al.*

685 Atmospheric nanoparticles

Detecting supramolecular organic nanoparticles during heat wave —R. Zhang *et al.*

686 Neuroscience

Myelin sheaths in the central nervous system can withstand damage and dynamically remodel
—D. Arafa *et al.*

PERSPECTIVE p. 660

687 Molecular biology

Mechanisms linking cytoplasmic decay of translation-defective mRNA to transcriptional adaptation
—M. A. El-Brolosy *et al.*

PERSPECTIVE p. 657

688 Metabolism

Mitochondrial control of fuel switching via carnitine biosynthesis —C. Auger *et al.*

PERSPECTIVE p. 659

RESEARCH ARTICLES

689 Time domain astronomy

Disappearance of a massive star in the Andromeda Galaxy due to formation of a black hole
—K. De *et al.*

PODCAST

694 Plant science

Recruitment of bifunctional regulator thermospermine to methylated ribosomes directs xylem fate —D. Ko *et al.*

700 Mycology

Dihydroxyhexanoic acid biosynthesis controls turgor in pathogenic fungi
—N. Kumakura *et al.*

707 Thermal properties

Metallic θ -phase tantalum nitride has a thermal conductivity triple that of copper —S. Li *et al.*

712 Biomaterials

Functional gradients facilitate tactile sensing in elephant whiskers
—A. K. Schulz *et al.*

719 Fisheries

Fishing ban halts seven decades of biodiversity decline in the Yangtze River —F. Xiong *et al.*

724 Electrochemistry

Enhanced Li-ion diffusion improves N_2 -to- NH_3 current efficiency at 100 mA cm^{-2}
—Q. Zhang *et al.*

PERSPECTIVE p. 656

Science serves as a forum for discussion of important issues related to the advancement of science by publishing material on which a consensus has been reached as well as including the presentation of minority or conflicting points of view. Accordingly, all articles published in *Science*—including editorials, news, commentary, and book reviews—are signed and reflect the individual views of the authors and not official points of view adopted by AAAS or the institutions with which the authors are affiliated. *Science* (ISSN 0036-8075) is published weekly on Thursday, except last week in December, by the American Association for the Advancement of Science, 1200 New York Avenue, NW, Washington, DC 20005. Periodicals mail postage (publication No. 484460) paid at Washington, DC, and additional mailing offices. Copyright © 2026 by the American Association for the Advancement of Science. The title *Science* is a registered trademark of the AAAS. Domestic individual membership, including subscription (12 months): \$165 (\$74 allocated to subscription). Domestic institutional subscription (51 issues): \$3125; Foreign postage extra: Air assist delivery: \$135. First class, airmail, student, and emeritus rates on request. Canadian rates with GST available upon request, GST #125488122. Publications Mail Agreement Number 1069624. Printed in the U.S.A. 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 96178, Washington, DC 20090-6178. Single-copy sales: \$15 each plus shipping and handling available from backissues.sciencemag.org; bulk rate on request. Authorization to reproduce material for internal or personal use under circumstances not falling within the fair use provisions of the Copyright Act can be obtained through the Copyright Clearance Center (CCC), www.copyright.com. The identification code for *Science* is 0036-8075. *Science* is indexed in the Reader's Guide to Periodical Literature and in several specialized indexes.