**NEWS**

**IN BRIEF**

892 News at a glance

**IN DEPTH**

894 Vaccine wagers on coronavirus surface protein pay off
Modernia reports early evidence of excellent efficacy, moving its mRNA candidate closer to widespread use By J. Cohen

895 Reinfections, still rare, provide clues on immunity
The growing group of people who get sick twice suggests protection can wane relatively quickly By J. de Vrieze

897 ‘Magic angle’ graphene’s next trick: superconducting devices
Twisted carbon sheets turned into switches that could make quantum computers smaller and more controllable By C. Wood

898 Like CRISPR, mystery gene editor began as a virus fighter
The genetic elements called retroons can only edit single-cell organisms, so far By E. Pennisi

900 China set to bring back rocks from the Moon
Chang’e-5’s lunar samples could firm up shaky crater count dating system for the rocky planets By D. Normile

**FEATURES**

901 Seas are rising faster than ever
A new satellite will monitor coastal hot spots, where currents amplify global trends By P. Voosen

902 Tomorrow’s catch
Genomic technologies promise dramatic gains for aquaculture by accelerating the breeding of better strains By E. Stokstad

**INSIGHTS**

906 Drugs from bugs in creatures of the sea
A bacterium from the sea squirt microbiome makes a natural product with antifungal activity By L. E. Cowen

907 Transferring allergies in the womb
Maternal antibodies prime fetal mast cells in utero for subsequent postnatal allergy responses By M. E. Rothenberg

909 The origin of diarrhea in rotavirus infection
Messengers from rotavirus-infected cells induce pathogenic signaling in neighboring cells By M. Stanifer and S. Boulan

**POLICY FORUM**

916 Community-led governance for gene-edited crops
A post–market certification process could promote transparency and trust By J. Kuzma and K. Griege

919 Alphabets and their origins
A new documentary series surveys the inception and evolution of the written word By A. Robinson

**910 The more and less of electronic-skin sensors**
Sensors can measure both strain and temperature or measure force without affecting touch By X. Liu

**912 The molecular wagon that stays on track**
Single molecules are sent and received accurately over long distances across a surface By F. Esch and B. A. J. Lechner

**913 Advancing new tools for infectious diseases**
Therapeutics and vaccine development for infectious diseases could be transformed By R. Gupta

**915 Georgina Mace (1953–2020)**
Pioneering conservation biologist and sustainability scientist By A. Purvis and K. E. Jones

**CONTENTS**

20 NOVEMBER 2020 • VOLUME 370 • ISSUE 6519

901 Seas are rising faster than ever
902 Tomorrow’s catch
906 Drugs from bugs in creatures of the sea
907 Transferring allergies in the womb
909 The origin of diarrhea in rotavirus infection
910 The more and less of electronic-skin sensors
912 The molecular wagon that stays on track
913 Advancing new tools for infectious diseases
915 Georgina Mace (1953–2020)
916 Community-led governance for gene-edited crops
919 Alphabets and their origins

Published by AAAS on July 29, 2021

http://science.sciencemag.org
930 Virology
Rotavirus induces intercellular calcium waves through ADP signaling. A. L. Chang-Graham et al.
RESEARCH ARTICLE SUMMARY; FOR FULL TEXT: DX.DOI.ORG/10.1126/SCIENCE.ABC3621
PERSPECTIVE p. 910

931 Photosynthesis
RESEARCH ARTICLE SUMMARY; FOR FULL TEXT: DX.DOI.ORG/10.1126/SCIENCE.ABB6350

932 Neurodegeneration
Autosomal dominant VCP hypomorph mutation impairs disaggregation of PHF-tau. N. F. Darwich et al.
RESEARCH ARTICLE SUMMARY; FOR FULL TEXT: DX.DOI.ORG/10.1126/SCIENCE.AAY8826

933 Wildlife disease
Divergent impacts of warming weather on wildlife disease risk across climates. J. M. Cohen et al.
RESEARCH ARTICLE SUMMARY; FOR FULL TEXT: DX.DOI.ORG/10.1126/SCIENCE.ABB1702

934 Neurodevelopment
Gene regulatory networks controlling vertebrate retinal regeneration. T. Hoang et al.
RESEARCH ARTICLE SUMMARY; FOR FULL TEXT: DX.DOI.ORG/10.1126/SCIENCE.ABB9998

935 Developmental biology
A human tissue screen identifies a regulator of ER secretion as a brain-size determinant. C. Esk et al.

941 Immunology
Fetal mast cells mediate postnatal allergic responses dependent on maternal IgE. R. Msalam et al.
PERSPECTIVE p. 907

950 Coronavirus
Ultrapotent human antibodies protect against SARS-CoV-2 challenge via multiple mechanisms. M. A. Tortorici et al.

RESEARCH ARTICLES

926 From Science and other journals

929 Fire ecology
Fire and biodiversity in the Anthropocene. T. Kelly et al.
REVIEW SUMMARY; FOR FULL TEXT: DX.DOI.ORG/10.1126/SCIENCE.ABB0355

924 Tracking development at the cellular level
Single-cell genomic methods enable developmental mapping of entire organisms. By J. Cao

922 Space debris puts exploration at risk
By D. Greenbaum

921 Retraction
By T. Sijen et al.

921 Eroded protections threaten U.S. forests
By K.-V. Pérez-Hammerle et al.

922 Technical Comment abstracts

922 Errata

PRIZE ESSAY

924 Tracking development at the cellular level
Single-cell genomic methods enable developmental mapping of entire organisms. By J. Cao

ON THE COVER

Spatial control over molecular movement is typically limited because motion at the atomic scale follows stochastic processes. When single dibromoterfluorene molecules are aligned along a specific direction on a silver surface, they become highly mobile and can be controllably transferred between two sharp probes, as illustrated here. Such a sender-receiver experiment enables transport of information, encoded in individual molecular entities, between precisely defined locations. See pages 912 and 957. Illustration: C. Bickel/Science

New Products......................... 1000
Science Careers....................... 1001
Science 370 (6519), 886-1006.