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COVER

Tens of thousands of books appear in this photograph of the interior of the sculpture *Idiom*, by Matej Krén. On page 176, Michel *et al.* describe an even larger collection: a 5.2-million-book corpus containing 4% of all books ever published. Statistical analysis of this corpus makes it possible to study cultural trends quantitatively.

Original sculpture (Municipal Library of Prague): Matej Krén/
Photograph: Zdeněk Urbánek

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Translational Pausing Ensures Membrane Targeting and Cytoplasmic Splicing of *XBP1u* mRNA

K. Yanagitani et al.

A peptide-mediated translational pause facilitates the unconventional splicing of a messenger RNA on the endoplasmic reticulum.

10.1126/science.1197142

Proteome Half-Life Dynamics in Living Human Cells

E. Eden et al.

In times of stress, long-lived proteins increase their durability.

10.1126/science.1199784

Aberrant Overexpression of Satellite Repeats in Pancreatic and Other Epithelial Cancers

D. T. Ting et al.

Noncoding RNAs transcribed from DNA repeats in heterochromatin are expressed at surprisingly high levels in tumors.

10.1126/science.1200801

KOI-126: A Triply Eclipsing Hierarchical Triple with Two Low-Mass Stars

J. A. Carter et al.

The Kepler telescope detected a triple stellar system and reveals details of the structure of low-mass stars.

10.1126/science.1201274

2500 Years of European Climate Variability and Human Susceptibility

U. Büntgen et al.

Variability of central European temperature and precipitation shows correlations with some major historical changes.

10.1126/science.1197175

SCIENCE NOW

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Highlights From Our Daily News Coverage

Hubble Confirms Nature of Mysterious Green Blob

'Hanny's Voorwerp' has been an enigma since its discovery in 2007.

<http://scim.ag/fa3RAV>

Rising Seas Look Inevitable

Effects of global warming will persist, even if we stop emitting greenhouse gases.

<http://scim.ag/fw98J3>

Measures to Save Ozone Stemmed a Lot More Global Warming

1980s spray-can clampdown prevented even larger temperature increase, modeling shows.

<http://scim.ag/hlo11u>

SCIENCE SIGNALING

www.sciencesignaling.org

The Signal Transduction Knowledge Environment

11 January issue: <http://scim.ag/ss011111>

RESEARCH ARTICLE: Activation State of the M3 Muscarinic Acetylcholine Receptor Modulates Mammalian Odorant Receptor Signaling

Y. R. Li and H. Matsunami

PERSPECTIVE: Autonomic Modulation of Olfactory Signaling

R. A. Hall

Crosstalk between neurotransmitter signaling and odorant signaling may enhance the sense of smell.

MEETING REPORT: Cilia 2010—The Surprise Organelle of the Decade

E. F. Smith and R. Rohatgi

Scientists discussed advances in cilia biology and the role of cilia in development and disease.

TEACHING RESOURCE: Signaling by Neuronal Swelling

R. D. Fields

Physical changes associated with the electrical activity of neurons mediate intercellular signaling.

SCIENCE CAREERS

Free Career Resources for Scientists

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A Veterinary Scientist's Unique Career Path

S. Webb

D.V.M.-Ph.D. Laura Richman's discovery of a novel elephant herpesvirus led to a career in human translational medicine.

<http://scim.ag/fy4p5p>

Discovering Unsung African-American Chemists

S. Weininger and L. Gortler

The two Knox brothers had distinguished careers in chemistry at a time when that was very difficult for African Americans.

<http://scim.ag/ha7Vtc>

SCIENCE TRANSLATIONAL MEDICINE

www.sciencetranslationalmedicine.org

Integrating Medicine and Science

12 January issue: <http://scim.ag/stm011211>

RESEARCH ARTICLE: Identification of an Adenylyl Cyclase Inhibitor for Treating Neuropathic and Inflammatory Pain

H. Wang et al.

PERSPECTIVE: Targeting Pain Where It Resides ... In the Brain

R. Sharif-Naeini and A. I. Basbaum

An adenylyl cyclase 1 inhibitor acting on the anterior cingulate cortex alleviates neuropathic pain.

RESEARCH ARTICLE: Carrier Testing for Severe Childhood Recessive Diseases by Next-Generation Sequencing

C. J. Bell et al.

>> [News story p. 130](#)

PERSPECTIVE: Molecular Technologies Open New Clinical Genetic Vistas

L. Jackson and R. E. Pyeritz

PODCAST

L. Jackson and O. Smith

New genome-sequencing technologies may enable expansion of carrier and prenatal genetic testing.

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THE GONZO SCIENTIST: The Science Hall of Fame
The frequency with which names appear in books has been used to create a pantheon of the most famous scientists of the past two centuries (with video).

>> [News story p. 135](#); [Research Article p. 176](#)

SCIENCE (ISSN 0036-8075) is published weekly on Friday, except the 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 © 2011 by the American Association for the Advancement of Science. The title SCIENCE is a registered trademark of the AAAS. Domestic individual membership and subscription (51 issues): \$149 (\$74 allocated to subscription). Domestic institutional subscription (51 issues): \$990; Foreign postage extra: Mexico, Caribbean (surface mail) \$55; other countries (air assist delivery) \$85. First class, airmail, student, and emeritus rates on request. Canadian rates with GST available upon request, GST #1254 88122. 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:** \$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 \$25.00 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.



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Science

331 (6014)

Science **331** (6014), 122-231.

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