

1619 This Week in *Science*

Editorial

1621 Federal Policies in Transition

Letters

1623 Collaboration and Responsibility: A. GOLDSTEIN; A. J. FRIEDHOFF ■
Eliminating NO_x: S. C. PLOTKIN ■ ILLASA and Modeling:
S. MAC LANE ■ Conflict over the Molecular Clock: J. A. W. KIRSCH AND
C. KRAJEWSKI; R. LEWIN ■ Corrections: J. RICHARDSON AND D. RICHARDSON

News & Comment

1625 Panel Backs Fetal Tissue Research
1626 Budget Advice from the Academy
1627 Locusts in Africa: A Plague is Possible
1628 Test Ban Talks Reach Impasse
1629 Britain Decides to Stay in CERN
U.S.–Soviet Ecology Agreement
1630 Weapons Reactor Restart Set Back
Hughes, GM Battle Over Stock Value
European Space Science
1631 Europeans Approve 6-GeV Synchrotron . . .
. . . Japanese Pick Site for 8-GeV Facility
Stopping the Brain Drain at NIH

Research News

1632 American Indian Language Dispute
1634 PCs Factor a “Most Wanted” Number ■ Souping up the Sieve
1636 Life History Patterns Emerge in Primate Study
1637 Costa Rican Biodiversity
1638 Progress Reported on Mouse Model for AIDS
1639 *Random Samples*: California, Here They Go ■ The Energy Index ■ Sally May Ride

Articles

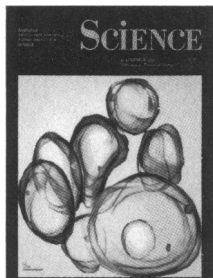
1640 Origins of the 1988 North American Drought: K. E. TRENBERTH,
G. W. BRANSTATOR, P. A. ARKIN
1645 Laser Femtochemistry: A. H. ZEWAIL
1654 The Intrinsic Electrophysiological Properties of Mammalian Neurons: Insights
into Central Nervous System Functions: R. R. LLINÁS

Research Articles

1665 Development of Disease and Virus Recovery in Transgenic Mice Containing
HIV Proviral DNA: J. M. LEONARD, J. W. ABRAMCZUK, D. S. PEZEN,
R. RUTLEDGE, J. H. BELCHER, F. HAKIM, G. SHEARER, L. LAMPERTH *et al.*

■ SCIENCE is published weekly on Friday, except the last week in December, and with an extra issue in February by the American Association for the Advancement of Science, 1333 H Street, NW, Washington, DC 20005. Second-class postage (publication No. 484460) paid at Washington, DC, and at an additional entry. Now combined with *The Scientific Monthly* © Copyright © 1988 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): \$70. Domestic institutional subscription (51 issues): \$110. Foreign postage extra: Canada \$32, other (surface mail) \$32, air-surface via Amsterdam \$85. First class, airmail, school-year, and student rates on request. Single copies \$3.00; back issues \$5.00; Biotechnology issue, \$5.50 (\$6 by mail); classroom rates on request; Guide to Biotechnology Products and Instruments \$16 (\$17 by mail). **Change of address:** allow 6 weeks, giving old and new addresses and seven-digit account number. 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 the base fee of \$1 per copy plus \$0.10 per page is paid directly to CCC, 21 Congress Street, Salem, Massachusetts 01970. The identification code for *Science* is 0036-8075/83 \$1 + .10. **Postmaster:** Send Form 3579 to *Science*, 1333 H Street, NW, Washington, DC 20005. *Science* is indexed in the *Reader's Guide to Periodical Literature* and in several specialized indexes.

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COVER Three-dimensional reconstruction of human epileptic cortex showing a large neuronal nucleus with a large nucleolus (yellow) and surrounded by multiple smaller astrocytic nuclei. The neuron shows an interior and abnormal position of one of the two chromosome 9 centromere signals (red). Astrocytic *in situ* hybridization signals are depicted either in magenta (pink) or cyan (turquoise) for each cell. See page 1687.

Reports

- 1671 Raoult's Law and the Melting Point Depression in Mesoscopic Systems: G. NITZ, P. MARQUARDT, D. STAUFFER, W. WEISS
- 1673 The Origin of the Superstructure in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$ as Revealed by Scanning Tunneling Microscopy: M. D. KIRK, J. NOGAMI, A. A. BASKI, D. B. MITZI, A. KAPITULNIK, T. H. GEBALLE, C. F. QUATE
- 1675 Gravitational Separation of Gases and Isotopes in Polar Ice Caps: H. CRAIG, Y. HORIBE, T. SOWERS
- 1678 Restoration of Torque in Defective Flagellar Motors: D. F. BLAIR AND H. C. BERG
- 1681 Association of Transfer RNA Acceptor Identity with a Helical Irregularity: W. H. McCLAIN, Y.-M. CHEN, K. FOSS, J. SCHNEIDER
- 1684 Infection of the SCID-hu Mouse by HIV-1: R. NAMIKAWA, H. KANESHIMA, M. LIEBERMAN, I. L. WEISSMAN, J. M. McCUNE
- 1687 Movement of the X Chromosome in Epilepsy: J. BORDEN AND L. MANUELIDIS
- 1691 Complementary Hemispheric Specialization in Monkeys: C. R. HAMILTON AND B. A. VERMEIRE
- 1694 Contributions of Quisqualate and NMDA Receptors to the Induction and Expression of LTP: D. MULLER, M. JOLY, G. LYNCH
- 1697 Molecular Cloning of Two Types of GAP Complementary DNA from Human Placenta: M. TRAHEY, G. WONG, R. HALENBECK, B. RUBINFELD, G. A. MARTIN, M. LADNER, C. M. LONG, W. J. CROSIER, K. WATT *et al.*
- 1700 Repair of the Secretion Defect in the Z Form of α 1-Antitrypsin by Addition of a Second Mutation: M. BRANTLY, M. COURTNEY, R. G. CRYSTAL
- 1702 Point Mutations in the Human Vitamin D Receptor Gene Associated with Hypocalcemic Rickets: M. R. HUGHES, P. J. MALLOY, D. G. KIEBACK, R. A. KESTERSON, J. W. PIKE, D. FELDMAN, B. W. O'MALLEY
- 1706 Engraftment of Immune-Deficient Mice with Human Hematopoietic Stem Cells: S. KAMEL-REID AND J. E. DICK

Book Reviews

- 1710 The Non-Darwinian Revolution, reviewed by D. L. HULL ■ Thinking About Science, K. BERGMAN ■ Transposition, M. MALAMY ■ The Lightning Discharge, W. D. RUST ■ Books Received

Products & Materials

- 1715 Biomolecular Purification ■ Scientific Calculator ■ Reaction Columns with Immobilized Enzymes ■ Precast Electrophoresis Gels ■ Digital Camera ■ Automated Fraction Collector ■ Literature

Author Index to Volume 242 is found on pages I-X.

Information for Contributors is found on pages XI-XII.

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Federal Policies in Transition

During the past several months hundreds of groups have developed recommendations to present to President-elect George Bush and his transition team. Obviously some of the plans will receive more earnest attention than others. This is particularly true of two reports, one containing substantial contributions by collaborating authors Gerald Ford and Jimmy Carter, and a second sponsored by a distinguished Council on Competitiveness that includes leaders of industry, labor, and academia. The reports are mutually supportive in many ways, including a statement of the need for this country to improve its competitiveness. They note that the United States is not faring well in the global economy. For example, 15 years ago U.S. companies made 95% of telephones and 80% of television sets for U.S. homes. Today U.S. companies make 25% of telephones and 10% of television sets sold here. The U.S. share of world steel production in 1960 was 26%; now it is 11%.

The reports point to a relative paucity of U.S. investments directed at improving productivity. In turn, this lack is related to a poor national savings rate of 2% of gross national product (GNP). The average national savings rates of other industrial countries is about 10% of GNP. For Japan it is about 16%. The net national savings rate is defined as the sum of individual and corporate savings plus government surpluses or deficits. During the 1980s individuals have decreased their savings, and in 1987 U.S. consumers owed 85% of their year's after-tax income. The federal deficit also increased greatly.

There were few specific ideas about how to induce individuals to save more. (With plastic money so freely available, a downward trend in savings will probably continue.) Instead, the need to reduce the federal deficit was emphasized. A combination of budget cutting and increased taxes was recommended. The nondefense discretionary part of the budget is already so small that cuts must be found elsewhere, notably in the entitlement programs, which constitute 46% of the budget.

On the revenue side both reports cited cigarettes, alcohol, and gasoline as attractive targets for increases. In 1951 the excise tax represented 42% of the price of cigarettes; currently it amounts to only 15%. Similar remarks apply to beer, wine, and distilled spirits. The gasoline tax in some other countries amounts to \$1 a gallon or more. Here, the federal tax is 9.1 cents per gallon. For every cent added, \$1 billion of revenue would be obtained. The Council on Competitiveness, which made the most extensive studies of the deficit, also recommended consideration of moderate increases in the personal income tax, including a 33% rate on large incomes and a 5% surtax for all payers.

The reports recommended that more funds be made available to increase U.S. competence in science and technology. It was pointed out that although funds for federal R&D increased 100% during the past 7 years, 90% of this increase has been defense-related. In constant dollars civilian R&D is 14% below the 1980 level. In real terms National Science Foundation funds have been virtually unchanged for the past 20 years. During the past 20 years federal funding for university plants and facilities has declined 95% in real terms.

The Council on Competitiveness suggests that once the process of credible deficit reduction is under way, the following steps should be taken: strengthen the federal role in science and technology by doubling the NSF budget over 5 years, increase NSF funding for programs to encourage the development of science and engineering faculty, and provide additional federal resources to modernize university research facilities. The council would also make additional funding available for human resource development with emphasis on programs to serve the economically disadvantaged, to strengthen math and science education, and to provide training and employment services to dislocated workers.

The Council on Competitiveness says that the success of any deficit reduction effort will rest on the meshing of three basic principles. First, all sectors should contribute to the deficit-reduction initiative. Second, changes should be fair; they should not undermine the nation's historic commitment to equity. Third, attempts should be made to ensure that changes in either budget or tax policy increase economic efficiency and minimize any adverse impact on levels of private savings and investment.—PHILIP H. ABELSON