

ures who are likely to be familiar to readers of the 1990s. We are treated to Golden's encounters with many of the era's key figures in policy-making for weapons and national security—Blanpied thoughtfully provides brief biographical sketches of them—including J. Robert Oppenheimer, Vannevar Bush, Robert F. Bacher, James B. Conant, Lee A. DuBridge, Karl T. Compton, Theodore von Karman, and I. I. Rabi.

Golden's investigation led him to write a report to the President on 18 December 1950—Blanpied reprints the document—that a new OSRD was not needed at the moment, though Golden added that one might be required in a future emergency to provide a place for innovative scientists who might devise radically new weapons yet feel uncomfortable in a military organization. He urged that a different initiative was required—the creation of a regular science adviser to the president. Such a person could bring civilian scientific expertise more strongly to bear on problems of national defense and could initiate a new OSRD should one become necessary. Partly following Golden's recommendation, Truman, on 19 April 1951, established a Science Advisory Committee in the Office of Defense Mobilization, to provide advice not only to the director of the office but to himself on scientific matters, particularly in connection with national defense.

Blanpied also reprints the memorandum that Golden submitted, on 15 February 1951, concerning the new National Science Foundation (NSF). Here Golden dealt in part with the pivotal issue of whether the NSF should conduct military research, an activity that Vannevar Bush's original plan for the agency envisioned it would undertake. Golden had discovered that the military itself was already fostering an enormous variety of research. He recommended that the NSF stick to the strictly civilian task of basic research and training. Policy-making scientists agreed unanimously with that position, and the National Science Board made it the NSF's own.

Golden was a probing inquirer and lucid summarizer, and one wishes that Blanpied had published a broader range of his conversational memoranda. The memoranda Blanpied has chosen to reproduce do illuminate the origins of the scientific advisory system, but only in part. The omitted memoranda reveal in often vivid detail the attitudes toward defense research and civilian scientists in various military agencies at the time of the Korean War, including a resistance to civilian experts on the part of many military officers. They are not only historically valuable; they also undergirded Golden's recommendation for a civilian science adviser. What Golden learned about the military's resistance to civilian sci-

tists, not to mention about diversity and competition within defense R&D, significantly affected his conclusion that it would be advantageous for a civilian scientist to have the president's ear.

Military possessiveness of research also disappointed the early fortunes of the National Science Foundation. Bush, along with many of his colleagues, had expected that once the NSF was created military agencies such as the Office of Naval Research would turn over the basic research projects they were sponsoring to the care of the new civilian agency. Golden endorsed that expectation, but it quickly became clear that the military agencies would not likely cede any research projects (or monies) of consequence to the foundation. That refusal, combined with the lack of new resources for nonmilitary research during the emergency, left the NSF with little to do until after the war.

No matter for basic research and training: Although before the Korean War many academic scientists might have welcomed transfers from ONR to NSF, after it most did not. Defense R&D funding had skyrocketed during the conflict and continued rising after it. Most academic scientists believed, as did Lee DuBridge, the president of the California Institute of Technology, that Congress would not appropriate to NSF the sizable funds that it gave the military and that their universities would "go broke very promptly" if they had to rely on that (see this reviewer's "Cold War and hot physics: science, security, and the American state, 1945–1956," *Historical Studies in the Physical Sciences* 20 [no. 2], 259 [1990]).

They are not going broke in the current post-Cold War circumstances, but they are worried. For better or for worse, since World War II military considerations have been crucial in science policy-making and the science advisory system. Golden's memoranda provide a rich perspective on how, during the Korean emergency, they figured in shaping the future of both. The full set of them can be consulted in three presidential libraries, the Library of Congress, and the Center for the History of Physics of the American Institute of Physics.

Daniel J. Kevles

*Division of the Humanities
and Social Sciences,*

*California Institute of Technology,
Pasadena, CA 91125, USA*



Books Received

Atlas of Volcanic Landforms on Mars. Carroll Ann Hodges and Henry J. Moore. U.S. Geological Survey, Denver, CO, 1994. vi, 194 pp., illus. Paper, \$17. U.S.G.S. Professional Paper 1534.

THE NYLON MEMBRANE WITH SUPERIOR SENSITIVITY

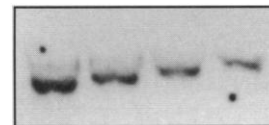
S&S NYTRAN®

HIGH BINDING CAPACITY & TENSILE STRENGTH

THE RECOMMENDED STANDARD FOR:

- ✓ Southern, northern blots
- ✓ Alkaline transfers
- ✓ Single copy gene detection certified
- ✓ Colony/plaque lifts
- ✓ Chemiluminescent detection

SINGLE COPY GENE DETECTION FROM ≤1 µg HUMAN GENOMIC DNA



5.0 µg 2.5 µg 1.25 µg 0.63 µg

Bam HI-restricted K562 DNA was electrophoresed on a 1.0% agarose gel and transferred to Nytran. Hybridization and chemiluminescent detection were performed as described in the S&S Rad-Free® Probe Labeling and Hybridization Kit instructions.

SUPERIOR FEATURES:

- Greater retention of sample molecules.
- Durable – no cracking or tearing, even after stripping and reprobing 10 times.
- Versatile – used for most standard transfer applications.
- Net neutral charge minimizes background in non-isotopic systems.

CALL US NOW!

1-800-245-4024

Outside U.S. and Canada, fax:
49-5561-791536



Schleicher & Schuell

Keene, NH 03431 • Tel 800/245 4024 • Fax 603/357-3627
Dassel, Germany • Tel (05561-791 0) • Fax 49-5561-791536

Mathematical Methods for Introductory Physics with Calculus. Ronald C. Davidson. 3rd ed. Saunders, Philadelphia, 1995. x, 237 pp., illus. Paper, \$21.

Nagasaki Journey. The Photographs of Yosuke Yamahata, August 10, 1945. Rupert Jenkins, Ed. Pomegranate Artbooks, Rohnert Park, CA, 1995. 128 pp., illus. Paper, £14.99.

Plants and Their Names. A Concise Dictionary. R. Hyam and R. Pankhurst. Oxford University Press, New York, 1995. x, 545 pp. \$29.95.

Polymers and Neutron Scattering. Julia S. Higgins and Henri C. Benoit. Clarendon (Oxford University Press), New York, 1995. xx, 436 pp., illus. \$98. Oxford Series on Neutron Scattering in Condensed Matter, 8.

Positive Harmonic Functions and Diffusion. Ross G. Pinsky. Cambridge University Press, New York, 1995. xvi, 474 pp. \$79.95. Cambridge Studies in Advanced Mathematics, 45.

Preventing Prostate Cancer. Screening versus Chemoprevention. R. T. D. Oliver, A. Beldegrun, and P. F. M. Wrigley, Eds. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, 1995. x, 335 pp., illus. \$75. Cancer Surveys, vol. 23.

The Price of Greatness. Resolving the Creativity and Madness Controversy. Arnold M. Ludwig. Guilford, New York, 1995. x, 310 pp., illus. \$26.95.

A Primer of Ecology. Nicholas J. Gotelli. Sinauer, Sunderland, MA, 1995. xviii, 206 pp., illus. Paper, \$18.95.

Questioning Chemotherapy. Ralph W. Moss. Equinox Press, Brooklyn, NY, 1995. ii, 214 pp. Paper, \$19.95 or \$C25.95.

The Remembering Self. Construction and Accuracy in the Self-Narrative. Ulric Neisser and Robyn Fivush, Eds. Cambridge University Press, New York, 1994. xii, 301 pp., illus. \$49.95. Emory Symposia in Cognition, 6. Based on a symposium, Atlanta, Jan. 1991.

Shaping National Responses to Climate Change. A Post-Rio Guide. Henry Lee, Ed. Island Press, Washington, DC, 1995. xiv, 303 pp., illus. \$48; paper, \$24.95.

Shaping Time. Music, the Brain, and Performance.

David Epstein. Schirmer Books (Simon and Schuster Macmillan), New York, NY, 1995. xviii, 598 pp., illus., + plates. \$47.

Sibling Relationships Across the Life Span. Victor G. Cicirelli. Plenum, New York, 1995. xii, 255 pp. \$39.50.

Soil Amendments. Impacts on Biotic Systems. Jack E. Rechigl, Ed. Lewis (CRC), Boca Raton, FL, 1995. xii, 321 pp., illus. \$79.95. Agriculture and Environment.

Soothing the Establishment. The Impact of Foreign-Born Scientists and Engineers on America. David S. North. University Press of America, Lanham, MD, 1995. vi, 184 pp. \$29.50.

Stardust to Planets. A Geological Tour of the Solar System. Harry Y. McSweeney, Jr. St. Martin's Griffin, New York, 1995. xii, 243 pp., illus. \$14.95 or \$C21.

Theoretical Aspects of Homogeneous Catalysis. Applications of *Ab Initio* Molecular Orbital Theory. Piet W. N. M. van Leeuwen, Keijiro Morokuma, and Joop H. van Lenthe, Eds. Kluwer, Norwell, MA, 1995. vi, 217 pp., illus. \$109 or £70 or Dfl. 170. Catalysis by Metal Complexes, vol. 18.

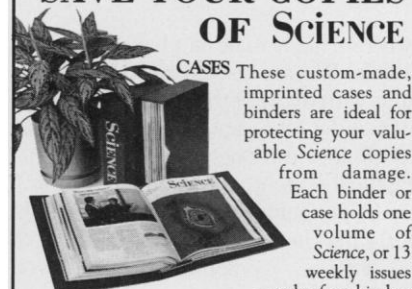
Publishers' Addresses

Below is information about how to direct orders for books reviewed in this issue. A fuller list of addresses of publishers represented in *Science* appears in the issue of 26 May 1995, page 1220.

AAAS Directorate for Science and Policy Programs, attn: Bonnie Cassidy, 1333 H St., NW, Washington, DC 20005. Phone: 202-326-6600. Fax: 202-289-4950. E-mail: bcassidy@aaas.org.

Columbia University Press, Order Dept., 136 S. Broadway, Irvington-on-Hudson, NY 10533. Phone: 800-944-8648; 914-591-9111. Fax: 800-944-1844; 914-591-9201.

SAVE YOUR COPIES OF SCIENCE



CASES These custom-made, imprinted cases and binders are ideal for protecting your valuable *Science* copies from damage. Each binder or case holds one volume of *Science*, or 13 weekly issues

BINDER

— order four binders or cases to hold a complete year of issues. Constructed from reinforced board and covered with durable, leather-like red material and stamped in gold, the cases are V-notched for easy access; binders have a special spring mechanism to hold individual rods which easily snap in.

Cases	1 — \$ 8.95	3 — \$24.95	6 — \$45.95
Binders	1 — \$11.25	3 — \$31.85	6 — \$60.75

SCIENCE

Jesse Jones Industries, Dept. 95 SCE
499 East Erie Ave., Philadelphia, PA 19134

Enclosed is \$_____ for _____ Cases; _____ Binders. Add \$1.50 per case/binder for postage & handling. Outside USA \$3.50 per case/binder (US funds only). PA residents add 7% sales tax.

Print Name _____

Address _____

No P.O. Box Numbers Please

City _____

State/Zip _____

CHARGE ORDERS (Minimum \$15): Am Ex, Visa, MC, DC accepted. Send card name, #, Exp. date.

CALL TOLL FREE 7 days, 24 hours 1-800-825-6690

Outside the US call 215-425-6600 Allow 4-6 weeks for delivery

— SATISFACTION GUARANTEED —

Journal of Biomedical Science

A rapidly developing interdisciplinary journal, with a global perspective on basic and clinical biomedical research,

Journal of Biomedical Science is guided by an outstanding editorial board with editors on three continents and is widely distributed in Asia, Europe, and the Americas. The journal invites the submission of papers on significant original research and of current review articles. All manuscripts are stringently peer-reviewed. There is no page charge for publication.

A selection of articles published in 1994/1995

Herpes-Simplex-Virus-Infected Cells Produce a Protein that Binds to TAR DNA Region of the Human Immunodeficiency Virus Type 1 Long Terminal Repeat: *Vlach, J.; Wilcox, K.W.; Pitha, P.M.*

Differential Effects of Glycosphingolipids on Protein Kinase C Activity in PC12D Pheochromocytoma Cells: *Yu, R.K.; Ariga, T.; Yoshino, H.; Katoh-Semba, R.; Ren, S.*

Role of Protein Phosphorylation in Regulation of Brain L-Glutamate Decarboxylase Activity: *Bao, J.; Nathan, B.; Hsu, C.C.; Zhang, Y.; Wu, R.; Wu, J.Y.*

Mechanisms of Tax Regulation of Human T Cell Leukemia Virus Type I Gene Expression: *Franklin, A.A.; Nyborg, J.K.*

Apolipoprotein E Genotyping in Turkish Myocardial Infarction Survivors and Healthy Controls: *Hergenc, G.; Taga, Y.; Emerk, K.; Cirakoglu, B.*

Differential Effects of Corticotropin-Releasing Hormone on Central Dopaminergic and Noradrenergic Neurons: *Pan, J.T.; Lookingland, K.J.; Moore, K.E.*

New Insights into the Structure and Function of the Thyroid Hormone Receptor: *Cheng, S.Y.*

Structural Organization of the Spliced Immediate-Early Gene Complex that Encodes the Major Acidic Nuclear (IE1) and Transactivator (IE2) Proteins of African Green Monkey Cytomegalovirus: *Chang, Y.N.; Jeang, K.T.; Lietman, T.; Hayward, G.S.*

Please direct your submissions and any inquiries to:

Dr. C.C. Chang
Natl. Sci. Council: Room 1701
106 Ho-ping East Road, Sec. 2
Taipei, Taiwan
Tel. +886 2 737 7594
Fax +886 2 737 7248

Dr. B. Berkhout
Univ. of Amsterdam
Academic Medical Center
Meibergdreef 15
1105 AZ Amsterdam
The Netherlands
Tel. +31 20 566 4854
Fax +31 20 691 6531

Dr. K.T. Jeang
NIAID/NIH
Bldg. 4, Rm. 306
Bethesda, MD 20892, USA
Tel. +1 (301) 496 6680
Fax +1 (301) 402 0226

For subscriptions and free sample copies please contact:
S. Karger AG, P.O. Box,
CH-4009 Basel, Switzerland
Fax +41 61 306 12 34

KARGER