139 This Week in Science

141 Gold

143 The Image of Mathematics: F. L. Gilfeather; G. Kolata ■ Sequencing the Human Genome: H. Noll

145 Over a (Pork) Barrel: The Senate Rejects Peer Review ■ “When Did We Agree That Peers Would Cut the Melon?”
147 U.S. Agencies May Be Shut Out of Chernobyl Follow-Up
148 If Terrorists Go Nuclear
149 New Blood Test Raises Thorny Issues
150 Will Growth Hormone Swell Milk Surplus?
152 Europe Pushes Ahead with Plans for Joint Projects

155 Brain Architecture: Beyond Genes
157 Molecular Biology of Homo sapiens
158 Cold Spring Harbor Briefings: New Alpha-Globin Gene Discovered ■ c-myc Implicated in RNA Processing ■ Amplifying DNA by the Magic of Numbers ■ First Success with Reverse Genetics ■ AIDS Virus Entry Pinpointed in Brain ■ Chimeric Receptors Give Clues to Oncogene Action ■ Important Advance in Gene Therapy

171 Semiclassical Methods in Chemical Physics: W. H. Miller
178 The Direct Methods of X-ray Crystallography: H. Hauptman

184 The Ninth Component of Complement and the Pore-Forming Protein (Perforin 1) from Cytotoxic T Cells: Structural, Immunological, and Functional Similarities: J. D.-E Young, Z. A. Cohn, E. R. Podack


198 Impact Ejecta Horizon Within Late Precambrian Shales, Adelaide Geosyncline, South Australia: V. A. Gostin, P. W. Haines, R. J. F. Jenkins, W. Compton, I. S. Williams

SCIENCE is published weekly on Friday, except the last week in December, and with a plus issue in May 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. Copyright © 1986 by The American Association for the Advancement of Science. Domestic individual membership and subscription (51 issues): $65. Domestic institutional subscription (51 issues): $99. Foreign postage extra: Canada $2.40, other (surface mail) $27, air-surface via Amsterdam $60. First class, airmail, school-year, and student rates on request. Single copies $2.50 ($3 by mail); back issues $4 ($4.50 by mail). 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 0036-8075/86 $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.

The American Association for the Advancement of Science was founded in 1848 and incorporated in 1874. Its objects are to further the work of scientists, to facilitate cooperation among them, to foster scientific freedom and responsibility, to improve the effectiveness of science in promoting the public welfare, and to increase public understanding and appreciation of the importance and promise of the methods of science in human progress.
Quadrants from x-ray diffraction patterns recorded from fibers of the two-stranded polynucleotide poly[d(A-T)]·poly[d(A-T)] at various stages during the D to B conformational transition in the DNA double helix. The diffraction patterns were recorded using the Science and Engineering Research Council’s Daresbury Laboratory Synchrotron Radiation Source. See page 195. [W. Fuller, Department of Physics, University of Keele, Staffordshire ST5 5BG, United Kingdom]