SCIENCE

1179 This Week in Science

Editorial

1181 Global Manufacturing Competition

Letters

1183 "Disloyalty" and DOD Funding: S. D. Drell; P. Sirkewitz; D. A. Hicks ■ "Tradition" Questioned: E. Theelen ■ The SSC and a Balanced Budget: R. Roy

News & Comment

1185 McCague Quits White House Post
1186 Midgetman Missile Plans Generate Political Debate
1187 A Worrisome Shift in Nuclear Strategy
1189 White House to Release Biotechnology Guidelines

Briefing: Wisconsin Synchrotron Ring Back in Business ■ GAO Hits Accounting on DOE Accelerators ■ Space Science Board Endorses Conventional Rockets for Science Missions ■ MIT's Relationship with DOD Lab Criticized

Research News

1192 Pressures Measured in Live Hip Joint
1193 Atoms in Strong Laser Fields Obey the Rules
1196 Brain Function Decline in Children with AIDS

Biomedical Briefing: Where Is the AIDS Virus Harbored? ■ A Perspective on Degenerative Brain Disease ■ Depression, Anorexia, Cushing's Link Revealed ■ Limiting Heart Attack Injury

Association Affairs

1199 Sheila E. Widnall: President-Elect of AAAS: W. R. Sears

Articles

1219 Pattern Recognition Used to Investigate Multivariate Data in Analytical Chemistry: P. C. Jurs
1225 Accretion Rate of Extraterrestrial Matter: Iridium Deposited 33 to 67 Million Years Ago: F. T. Kyte and J. T. Wasson

Research Articles


Reports

1242 Plant Glutamine Synthetase Complements a glhA Mutation in Escherichia coli: S. DasSarma, E. Tischer, H. M. Goodman

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. 464460) paid at Washington, DC, and at an additional entry. Now combined with The Scientist® Monthly® Copyright 1986 by the American Association for the Advancement of Science. Domestic individual membership and subscription (51 issues): $65. Domestic institutional subscription (51 issues): $98. Foreign postage rates: Canada $24, other (surface mail) $27, air-surface via Amsterdam $65. 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 public understanding and appreciation of the importance and promise of the methods of science in human progress.
<table>
<thead>
<tr>
<th>Page 1245</th>
<th>Distribution of and Feeding by the Copepod <em>Pseudocalanus</em> Under Fast Ice During the Arctic Spring: R. J. Conover, A. W. Herman, S. J. Prinsenberg, L. R. Harris</th>
</tr>
</thead>
<tbody>
<tr>
<td>1247</td>
<td>Shape Analysis of the Histone Octamer in Solution: E. C. Überbacher, J. M. Harp, E. Wilkinson-Singley, G. J. Bunick</td>
</tr>
<tr>
<td>1258</td>
<td>Pertussis Toxin Gene: Nucleotide Sequence and Genetic Organization: C. Locht and J. M. Keith</td>
</tr>
<tr>
<td>1264</td>
<td>Caffeine-Induced Uncoupling of Mitosis from the Completion of DNA Replication in Mammalian Cells: R. Schlegel and A. B. Pardee</td>
</tr>
</tbody>
</table>

### Technical Comments


### AAAS News

**1274** AAAS Annual Elections: Preliminary Announcement ■ New “Expedition” Benefit Announced for AAAS Members ■ Denise Weiner Memorial Fund Established ■ Pacific/Artic Divisions Reminder ■ Problems with Promotional Mailings

### Book Reviews

**1278** Geologists and Ideas, reviewed by R. E. Wallace ■ Genetic Differentiation and Dispersal in Plants, S. C. H. Barrett ■ Late Cenozoic Paleoclimates of the Southern Hemisphere, D. A. Livingstone ■ Prehistory of the Indo-Malayan Archipelago, W. S. Ayres ■ Some Other Books of Interest ■ Books Received

### Products & Materials

**1283** Molecular Biology Teaching ■ Dilutor-Dispenser ■ Chromatography Fraction Collector ■ Blood Flow Measurement ■ Sorbent Extraction Technology ■ Literature