

1027 This Week in *Science*

Editorial

1029 The Cystic Fibrosis Gene Story

Letters

1031 Agent Orange Studies: M. GOUGH; J. F. SOMMER, JR. ■ "Radiation-Induced" Cancer: H. CEMBER ■ Balance in *Science*: S. M. REILLY; D. E. KOSHLAND, JR. ■ Correction: M. E. ROTH, M. J. LACY, L. K. MCNEIL, D. M. KRANZ

News & Comment

1034 NIH, Inc.: The CRADA Boom ■ CRADAs Raise Conflict Issues  
1036 Gene Mappers Meet on Strategy  
1037 Jet Propulsion Lab Looks to Life After Voyager  
1038 An Entrepreneurial Tree Sprouts in Europe ■ Risk Phobia: Europe's Disease?

Research News

1041 Biomagnetism Attracts Diverse Crowd  
1043 The (Liquid) Breath of Life  
1044 Phobos at Mars: A Dramatic View—and Then Failure  
1046 *Briefings*: Refurbishing Our Personality Quiz ■ Short List for NIH ■ Space Buff Quayle Seeks Spy "Master" ■ Massachusetts *v.* Alsabti ■ Tarheel Turmoil Re Supercomputer ■ Enough Already?

Articles

1047 One Fifth of the Nation's Children: Why Are They Poor?:  
M. J. BANE, D. T. ELLWOOD  
1054 *Dictyostelium discoideum*: A Model System for Cell-Cell Interactions in Development: P. DEVREOTES

Research Articles

1059 Identification of the Cystic Fibrosis Gene: Chromosome Walking and Jumping: J. M. ROMMENS, M. C. IANNUZZI, B. KEREM, M. L. DRUMM, G. MELMER, M. DEAN, R. ROZMAHEL, J. L. COLE, D. KENNEDY, N. HIDAKA *et al.*  
1066 Identification of the Cystic Fibrosis Gene: Cloning and Characterization of Complimentary DNA: J. R. RIORDAN, J. M. ROMMENS, B. KEREM, N. ALON, R. ROZMAHEL, Z. GRZELCZAK, J. ZIELENSKI, S. LOK, N. PLAVSIC *et al.*  
1073 Identification of the Cystic Fibrosis Gene: Genetic Analysis: B. KEREM, J. M. ROMMENS, J. A. BUCHANAN, D. MARKIEWICZ, T. K. COX, A. CHAKRAVARTI, M. BUCHWALD, L.-C. TSUI

Reports

1088 All-Carbon Molecules: Evidence for the Generation of Cyclo[18]carbon from a Stable Organic Precursor: F. DIEDERICH, Y. RUBIN, C. B. KNOBLER, R. L. WHETTEN, K. E. SCHRIVER, K. N. HOUK, Y. LI

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**COVER** The discovery of the gene that is defective in the childhood disease cystic fibrosis has generated hope and excitement in the scientific and medical communities. See page 1059. The colored bars represent chromosomes from different patients with cystic fibrosis. Original data are from B. Kerem *et al.*, Table 3, page 1076. [Photograph by Carol Clayton of a child from the Cystic Fibrosis Foundation]

- 1090 Origin of Ancient Potash Evaporites: Clues from the Modern Nonmarine Qaidam Basin of Western China: T. K. LOWENSTEIN, R. J. SPENCER, Z. PENGXI
- 1093 Underplating and Partial Melting: Implications for Melt Generation and Extraction: G. W. BERGANTZ
- 1095 Rate of Formation of the ClO Dimer in the Polar Stratosphere: Implications for Ozone Loss: S. P. SANDER, R. R. FRIEDL, Y. L. YUNG
- 1098 Circadian System Controlling Release of Sperm in the Insect Testes: J. M. GIEBULTOWICZ, J. G. RIEMANN, A. K. RAINA, R. L. RIDGWAY
- 1100 A Chitin-Binding Lectin from Stinging Nettle Rhizomes with Antifungal Properties: W. F. BROEKAERT, J. VAN PARIJS, F. LEYNS, H. JOOS, W. J. PEUMANS
- 1102 Was Adenine the First Purine?: A. W. SCHWARTZ AND C. G. BAKKER
- 1104 Generation of a Catalytic Antibody by Site-Directed Mutagenesis: E. BALDWIN AND P. G. SCHULTZ
- 1107 Lineage-Specific Requirements of *c-abl* Function in Normal Hematopoiesis: D. CARACCILO, M. VALTIERI, D. VENTURELLI, C. PESCHLE, A. M. GEWIRTZ, B. CALABRETTA
- 1110 A Baculovirus Blocks Insect Molting by Producing Ecdysteroid UDP-Glucosyl Transferase: D. R. O'REILLY AND L. K. MILLER
- 1112 T Cells Against a Bacterial Heat Shock Protein Recognize Stressed Macrophages: T. KOGA, A. WAND-WÜRTTENBERGER, J. DEBRUYN, M. E. MUNK, B. SCHOEL, S. H. E. KAUFMANN
- 1115 Primary Structure of the  $\beta$  Subunit of the DHP-Sensitive Calcium Channel from Skeletal Muscle: P. RUTH, A. RÖHRKASTEN, M. BIEL, E. BOSSE, S. REGULLA, H. E. MEYER, V. FLOCKERZI, F. HOFMANN
- 1118 Molecular Characterization of the Human  $\beta_3$ -Adrenergic Receptor: L. J. EMORINE, S. MARULLO, M.-M. BRIEND-SUTREN, G. PATEY, K. TATE, C. DELAVIER-KLUTCHKO, A. D. STROSBERG

## Book Reviews

- 1124 Appropriating the Weather, *reviewed by*: J. R. FLEMING ■ CP Violation, J. F. DONOGHUE ■ Multiwavelength Astrophysics, M. HARWIT ■ The Precambrian-Cambrian Boundary, J. W. VALENTINE ■ Books Received

## Products & Materials

- 1127 Programmable Heating-Cooling Dry Block ■ Automated Electrophoresis Applicator ■ Low-Light Imaging System ■ Integrated System for DNA Dot Blot Detection ■ Video Microscope Systems ■ Custom Polyclonal Production ■ Literature

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245 (4922)

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