

543 This Week in *Science*

## Editorial

545 The Cell Cycle

## Letters

563 Information Age and Overload: K. E. ROE ■ High School Science Education: S. H. STOW AND T. L. ASHWOOD ■ O'Toole on O'Toole's Charges: M. O'TOOLE ■ Oil Spill Health Effects: D. P. RALL ■ Management at DOE: A. G. DUBA

## News & Comment

566 Room at the Top  
569 Global Warming Becomes Hot Issue for Bromley  
570 Ethics Debate Sends Tremors Through USGS  
572 Humanity 2, Computers 0  
573 New Life for Small Science  
574 *Briefings*: Malaria Research Under Scrutiny ■ Probing the Big Bang ■ The New Moon Race? ■ Women (Not) in Math ■ Software Solution ■ Welch Award to Davidson ■ Nicholson Replaced by Sanchez at NSF ■ Quake Delays Nobelists' Pitch ■ Two Who Never Joined the Revolution ■ NEH Proposes Core College Curriculum

## Research News

576 Watson versus Japan  
577 Japan and the SSC: Congress Raises a Flag  
578 How Do You Read from the Palimpsest of Life?  
580 Zero Gravity Produces Weighty Improvements

## Articles

### *Frontiers in Biology: The Cell Cycle*

603 G<sub>1</sub> Events and Regulation of Cell Proliferation: A. B. PARDEE  
609 S Phase of the Cell Cycle: R. A. LASKEY, M. P. FAIRMAN, J. J. BLOW  
614 Dominoes and Clocks: The Union of Two Views of the Cell Cycle: A. W. MURRAY AND M. W. KIRSCHNER  
622 Mitosis: J. R. MCINTOSH AND M. P. KOONCE  
629 Checkpoints: Controls That Ensure the Order of Cell Cycle Events: L. H. HARTWELL AND T. A. WEINERT  
635 Directing Cell Division During Development: P. H. O'FARRELL, B. A. EDGAR, D. LAKICH, C. F. LEHNER

## Research Articles

641 Mapping the *Drosophila* Genome with Yeast Artificial Chromosomes: D. GARZA, J. W. AJIOKA, D. T. BURKE, D. L. HARTL

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**COVER** SYNGAMY II is one of a series of paintings by the Pennsylvania artist Peter Cohen on the first mitosis within the fertilized egg. The mitochondria, which have assumed the round shape seen in the painting, leave a clear space within the cytoplasm for the dance of the chromosomes on the luminous spindle. The paintings of Peter Cohen are currently on exhibit at AAAS in Washington as part of the AAAS Art of Science and Technology Program, which displays work reflecting the interaction of art and science. See the articles on the cell cycle that begin on page 603.

## Reports

- 649 X-ray Diffraction to 302 Gigapascals: High-Pressure Crystal Structure of Cesium Iodide: H. K. MAO, Y. WU, R. J. HEMLEY, L. C. CHEN, J. F. SHU, L. W. FINGER
- 651 Protein Crystal Growth in Microgravity: L. J. DELUCAS, C. D. SMITH, H. WILSON SMITH, S. VIJAY-KUMAR, S. E. SENADHI, S. E. EALICK, D. C. CARTER, R. S. SNYDER, P. C. WEBER, F. R. SALEMME *et al.*
- 654 Proton Motive Force Involved in Protein Transport Across the Outer Membrane of *Aeromonas salmonicida*: K. R. WONG AND J. T. BUCKLEY
- 656 Expression and Characterization of a Functional Myosin Head Fragment in *Dictyostelium discoideum*: D. J. MANSTEIN, K. M. RUPPEL, J. A. SPUDICH
- 658 A Liver-Specific Enhancer in the Core Promoter Region of Human Hepatitis B Virus: J.-K. YEE
- 661 Initiation by Yeast RNA Polymerase II at the Adenoviral Major Late Promoter in Vitro: N. F. LUE, P. M. FLANAGAN, K. SUGIMOTO, R. D. KORNBERG
- 664 Identification of an AUUUA-Specific Messenger RNA Binding Protein: J. S. MALTER
- 666 Prevention of Allogeneic Bone Marrow Graft Rejection by H-2 Transgene in Donor Mice: C. ÖHLÉN, G. KLING, P. HÖGLUND, M. HANSSON, G. SCANGOS, C. BIEBERICH, G. JAY, K. KÄRRE
- 668 Vaccination Against Experimental Allergic Encephalomyelitis with T Cell Receptor Peptides: M. D. HOWELL, S. T. WINTERS, T. OLEE, H. C. POWELL, D. J. CARLO, S. W. BROSTOFF
- 670 The Neuron-Specific Protein PGP 9.5 Is a Ubiquitin Carboxyl-Terminal Hydrolase: K. D. WILKINSON, K. LEE, S. DESHPANDE, P. DUERKSEN-HUGHES, J. M. BOSS, J. POHL
- 673 A Biochemical Correlate of the Critical Period for Synaptic Modification in the Visual Cortex: S. M. DUDEK AND M. F. BEAR
- 675 Angiosperm Diversification and Paleolatitudinal Gradients in Cretaceous Floristic Diversity: P. R. CRANE AND S. LIDGARD

## Book Reviews

- 679 Leprosy, Racism, and Public Health, reviewed by A. M. BRANDT ■ Wonderful Life, W. C. SWEET ■ Science and Civilisation in China, L. F. GROSS ■ The Prefrontal Cortex, M. E. GOLDBERG ■ Some Other Books of Interest ■ Books Received

## Products & Materials

- 685 Hollow Fiber Bioreactor Systems for Cell Culture ■ Diode Ray Detector for HPLC ■ Stations Protect Animals from Contamination ■ Inverted Systems for Muscle Research ■ Culture System for Protein Production ■ Ultraviolet-Visible Spectrophotometer ■ Flow-Through Sensors for Organ Perfusion Studies ■ Literature

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