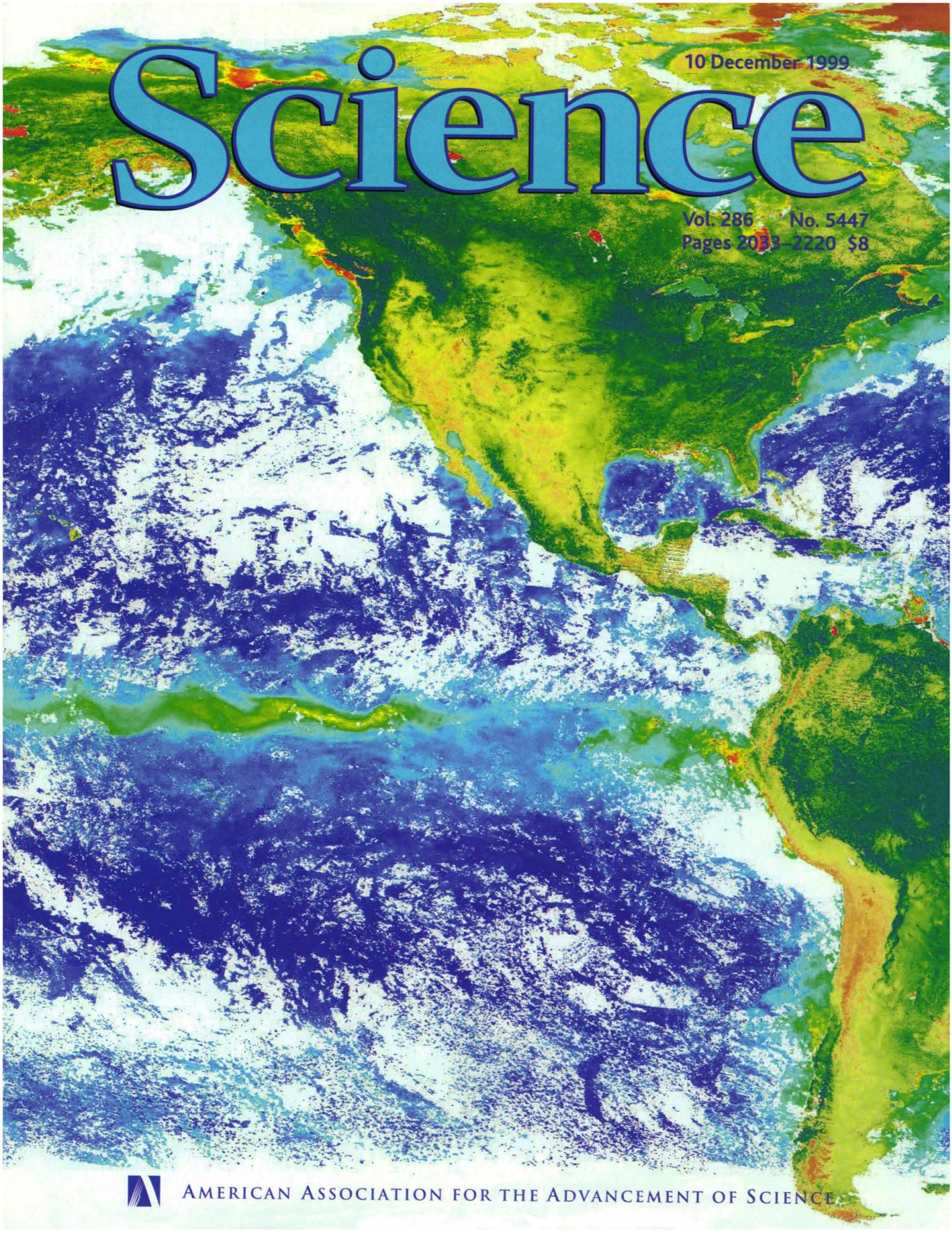

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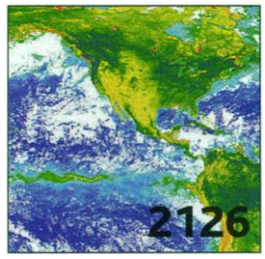
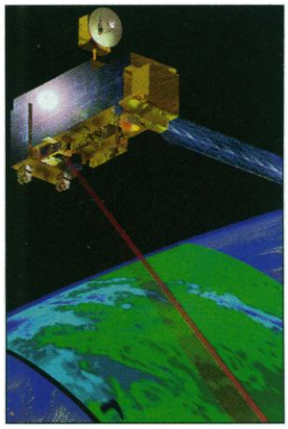


COVER SeaWiFS satellite composite of Earth's biosphere (ocean chlorophyll and land vegetation), acquired between 12 and 19 July 1998. Clouds are represented in white. The dramatic phytoplankton bloom (shown as a green and yellow band) that developed in the equatorial Pacific after the demise of the 1997–98 El Niño is beautifully captured. The bloom is distorted by complex oceanic waves with a wavelength of about 1000 km. [Image: SeaWiFS Project, NASA/Goddard Space Flight Center, and ORBIMAGE]



2064
A troubled view of Earth

NEWS

NEWS OF THE WEEK

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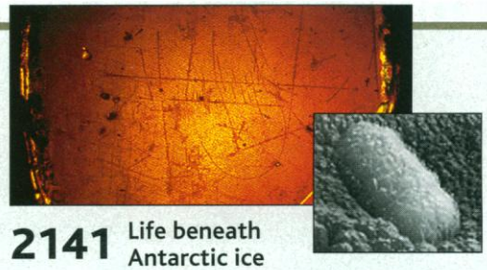

2141 Life beneath Antarctic ice

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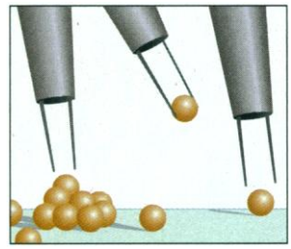

2095
How to make tiny tweezers

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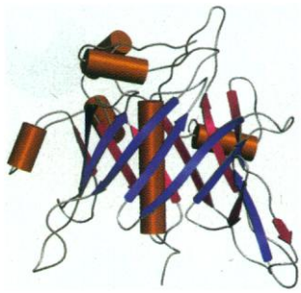

2119
"Eh-oh, Po!"

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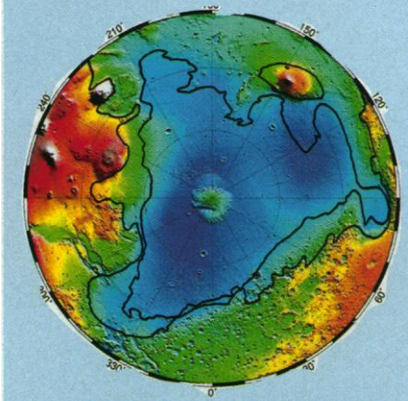
MARTIAN SEASHORES

Previous studies have suggested that early Mars experienced a warmer and wetter climate, and that liquid water may have been abundant. Head *et al.* (p. 2134) have analyzed Mars Global Surveyor altimeter data to refine the detailed topography of the martian



surface and present evidence that a large ocean existed in the northern lowlands. Their analysis suggests a possible shoreline with smooth topography within the shoreline boundaries, the termination of six outflow channels at the elevation of the shoreline, and the presence of several terraces that may be related to shoreline recession. The estimated volume of water that would have filled this proposed ocean is consistent with estimates of Mars' water budget.

EL NIÑO AND CO_2

During El Niño events, the tongue of warm surface water that spreads eastward across the equatorial Pacific Ocean reduces upwelling of cold, carbon dioxide (CO_2)–rich water and thus reduces the amount of CO_2 that is transferred to the atmosphere. Conversely, during La Niña years, when the eastern equatorial Pacific contains colder-than-average surface water, the CO_2 flux from atmosphere to the ocean is high. Chavez *et al.* (p. 2126; see the cover) have collected data from sea surface sensors, ships, and satellites to construct a detailed picture of the chemistry and biology of the 1997–1998 El Niño, one of the strongest ever observed. These data have allowed them to quantify the effects of zonal winds and ocean circulation on primary productivity and air-sea CO_2 fluxes.

LIFE BELOW THE ICE

Lake Vostok, located about 3743 meters below glacial ice near the center of East Antarctica, may be home to a long-isolated microbial ecosystem (see the Perspective by Vincent). This possibility has been investigated by drilling an ice core to within about 120 meters above the lake (to avoid contaminating this environment). Jouzel *et al.* (p. 2138) have analyzed the ice below 3500 meters and determined from the oxygen isotopic concentrations that this ice is probably refrozen lake water rather than glacial ice. Priscu *et al.* (p. 2141) and Karl *et al.* (p. 2144) have analyzed different depth sections of this ice core and confirmed that some of the ice is refrozen lake water. Using different techniques, they have found evidence for microorganisms in this ice. Priscu *et al.* found phylotypes related to extant members of the *alpha-* and *beta-Proteobacteria* and the Actinomycetes. Karl *et al.* determined that the bacteria may be viable based on respiration rates during incubations. Thus, Lake Vostok may support a low nutrient and low mass microbial population, despite being isolated from the atmosphere for more than 1 million years and may provide an analog for biogenic conditions during a snowball Earth event (complete glaciation of Earth's surface) or the possible ocean beneath Europa, a moon of Jupiter.

GETTING TO GRIPS WITH CARBON NANOTUBES

The ability to manipulate and move nanoparticles in three dimensions is a key requirement for nanotechnology. Kim and Lieber (p. 2148; see the Perspective by Mirkin) introduce a manipulation device constructed from two carbon nanotubes attached to either side of a glass rod. They are able to open and close a gap between the tubes by applying a voltage to the nanotubes, rather like a miniature pair of tweezers, and use this device to move around clusters of small particles. In addition, the conducting nanotubes can be used to probe the electronic properties of the clusters they hold.

TALE OF TUBBY

One approach to characterizing genes of unknown function is structure-based functional genomics, in which the three-dimensional structure of the encoded protein or of one of its domains is determined and then used to design experiments to search for function. Boggon *et al.* (p. 2119) applied this approach to the gene *tub*, which has been linked to obesity and retinitis pigmentosa. The crystal structure of its carboxyl-terminal domain reveals a β-strand barrel containing a central helix that presents a putative DNA binding groove on its surface. Further studies indicate a propensity for binding double-stranded DNA, localization to the nucleus of neurons, and capacity to serve as a transcriptional activator. Reconciling these qualities led to the working hypothesis of tubby as a cell-type specific regulator of gene expression in the mammalian brain.

ASSEMBLING TRANSCRIPTION COMPLEXES

A key step in eukaryotic transcription is the recognition of specific sequences in the promoter region by multisubunit transcription factors, which nucleate the assembly of the pre-initiation complex that includes general transcription factors and RNA polymerase II. Structures of the multisubunit transcription factors TFIID and TFTC are described at 35 angstrom resolution in two reports. TFIID is composed of TATA binding protein (TBP) and TBP associated factors (TAFs). TFTC does not contain TBP but does regulate transcription of promoters containing the TATA sequence. Andel *et al.* (p. 2153) describe the structure of a TFIID complex alone and in complex with the transcription factors TFIIA and TFIIB, and Brand *et al.* (p. 2151) compare the structures of a TFIID and a TFTC complex. Both TFIID and TFTC form horseshoe-shaped structures with a cavity large enough to accommodate DNA.

ANTIBODIES THAT HERD PATHOGENS

Even mice that are raised in sterile environments have antibodies. The physiologic role of "natural antibodies" is not clear. Ochsenbein *et al.* (p. 2156) report that natural antibodies contain specificities for various pathogens. When mice lacking these antibodies are infected, the viruses or bacteria become widely disseminated throughout multiple organs. Addition of antibody-containing normal mouse serum to these mice changes the localization of the pathogens, which are then concentrated in the spleen and lymph nodes. Thus, natural antibodies seem to prevent wide dissemination of the virus and target it to the organs of the immune system, where an immune response is initiated.

CONTINUED ON PAGE 2043

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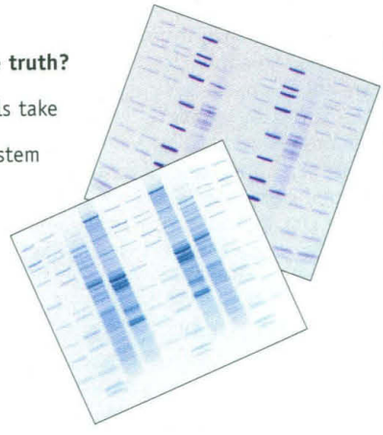

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CONTINUED FROM PAGE 2041

FINDING THE RIGHT PLACE TO WORK

How do B cells and T cells coordinate their movements so that lymphocytes with the appropriate specificities are at the right place at the right time? Specific interactions do occur, and Cyster (p. 2098) reviews how the chemokine highway helps direct traffic. Chemokines act as attractants and are expressed in temporally and physically discrete fashion. The receptors for chemokines are expressed only by those cells best able to mount an immune response. A specific case of immune cell localization is presented by Randolph *et al.* (p. 2159), who report that different subsets of T cells tend to be in discrete locations in the spleen, an organ that also hosts B cells. This T cell localization depends on the chemokine receptor CCR7, a receptor for the chemokine SLC, which T_H1 cells express. If T_H2 cells are forced to express CCR7, not only do they migrate to the wrong spots in the spleen, but they no longer provide help for B cells. Thus, CCR7 seems critical for appropriate localization of T cells to ensure an adequate immune response.

A MINIMALIST APPROACH TO LIFE

What is the minimum number of genes needed to make a living organism? Hutchison *et al.* (p. 2165) have been exploring this question by using transposon insertions to knock out genes of the fully sequenced organism, *Mycoplasma genitalium*, which has only 470 genes, and its relative, *M. pneumoniae*. They found only 255 to 340 of those genes, many with unknown function were required for growth under laboratory conditions. The ethics of using this information to construct a living organism in vitro are discussed by Cho *et al.* in a Policy Forum.

CREATING CORNEAS

An anatomically complete human corneal equivalent has been constructed by Griffith *et al.* (p. 2169; see the news story by Ferber) in vitro from immortalized cells and an artificial matrix. This artificial cornea responded like a natural cornea to osmoregulation, changes in gene expression in response to a surfactant, and in changes of corneal transparency in response to chemicals. Immediate applications include drug testing and research, and the long-term goal would be to create corneas for implants or transplantation.

NOT GONE TO SEED

Supra-annual synchronization of seed production, or mast-fruiting, occurs in many plant species, but its causes and adaptive significance have been a matter of much debate. In an extensive and long-term study of more than 50 species of dipterocarps—the dominant tree family in Bornean rainforests—Curran *et al.* (p. 2184; see the Perspective by Hartshorn and Bynum) demonstrate that seed production in these trees occurred only during the El Niño–Southern Oscillation (ENSO) event and that satiation of seed predators is the probable selective force favoring mast-fruiting. Disturbingly, the authors also report a total failure of dipterocarp seedling recruitment in a major Bornean national park caused by too extensive logging in the neighboring unprotected forest. This finding implies that southeast Asian rainforests might not persist even in protected areas.

TECHNICAL COMMENT SUMMARIES

Atmospheric CO_2 in the Eocene

The full text of these comments can be seen at www.sciencemag.org/cgi/content/full//286/5447/2043a

Pearson and Palmer (Reports, 11 June, p. 1824) used boron isotopes to infer past ocean pH during the Cenozoic. Because ocean pH is related to carbonate chemistry in the ocean, which is affected by equilibrium with atmospheric carbon, they then related the pH to past atmospheric CO_2 levels. One of their conclusions was that atmospheric CO_2 levels during the Eocene, a time when Earth's climate was much warmer than it is today, may have been similar to modern levels or slightly higher.

In a pair of Technical Comments, Caldiera and Berner, and Sundquist critique some of the assumptions involved in using ocean pH to assess atmospheric CO_2 levels and conclude that the inferred atmospheric CO_2 levels were likely too low.

In response, Pearson and Palmer note that their assumptions were conservative but highlight the uncertainties involved in this calculation and the need for additional information.

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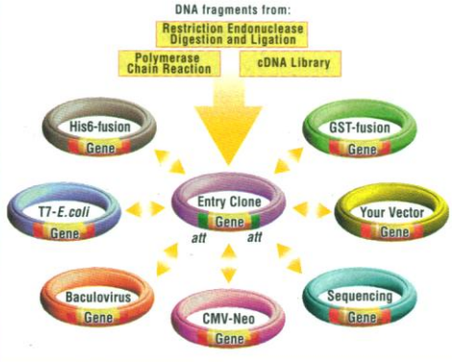

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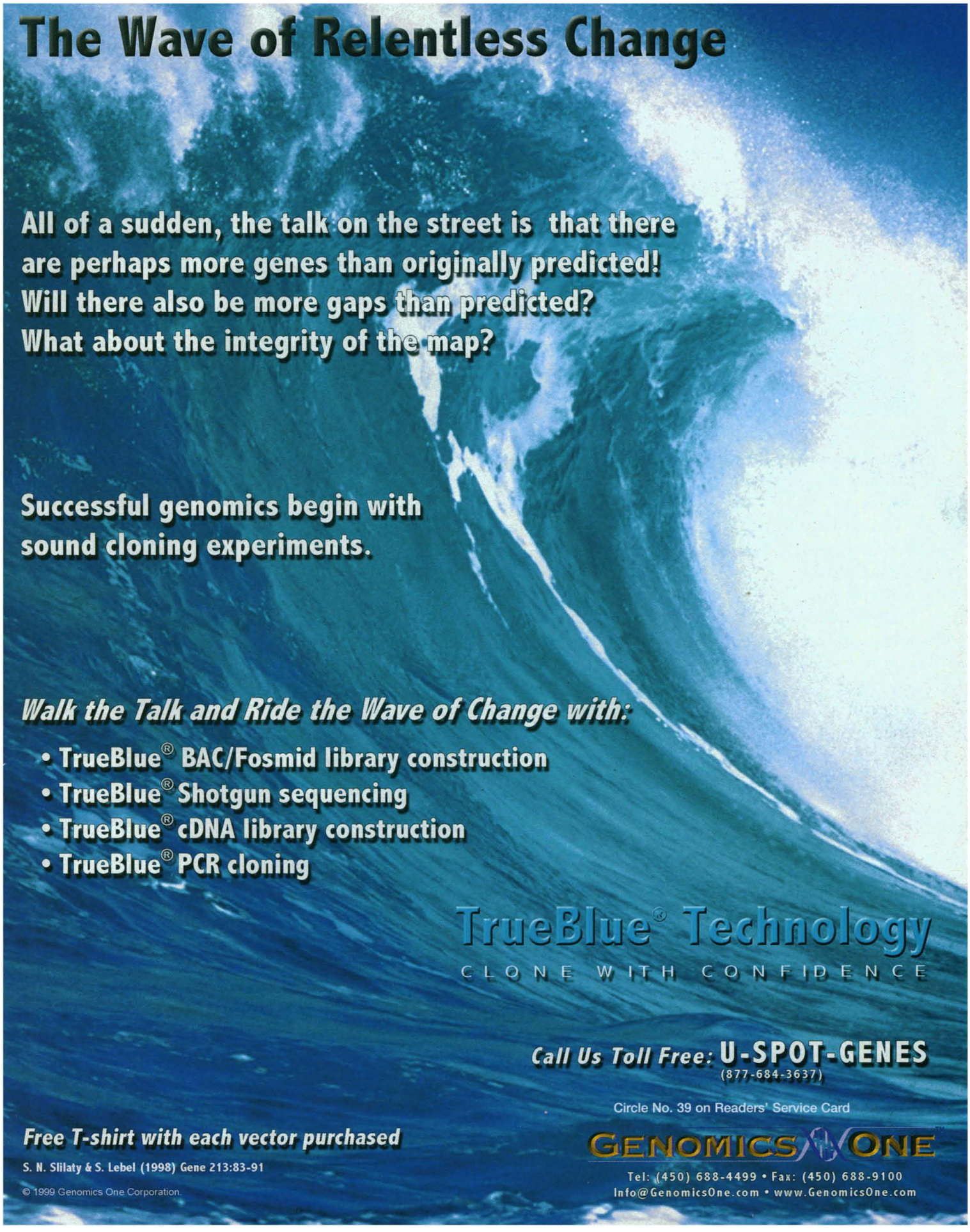
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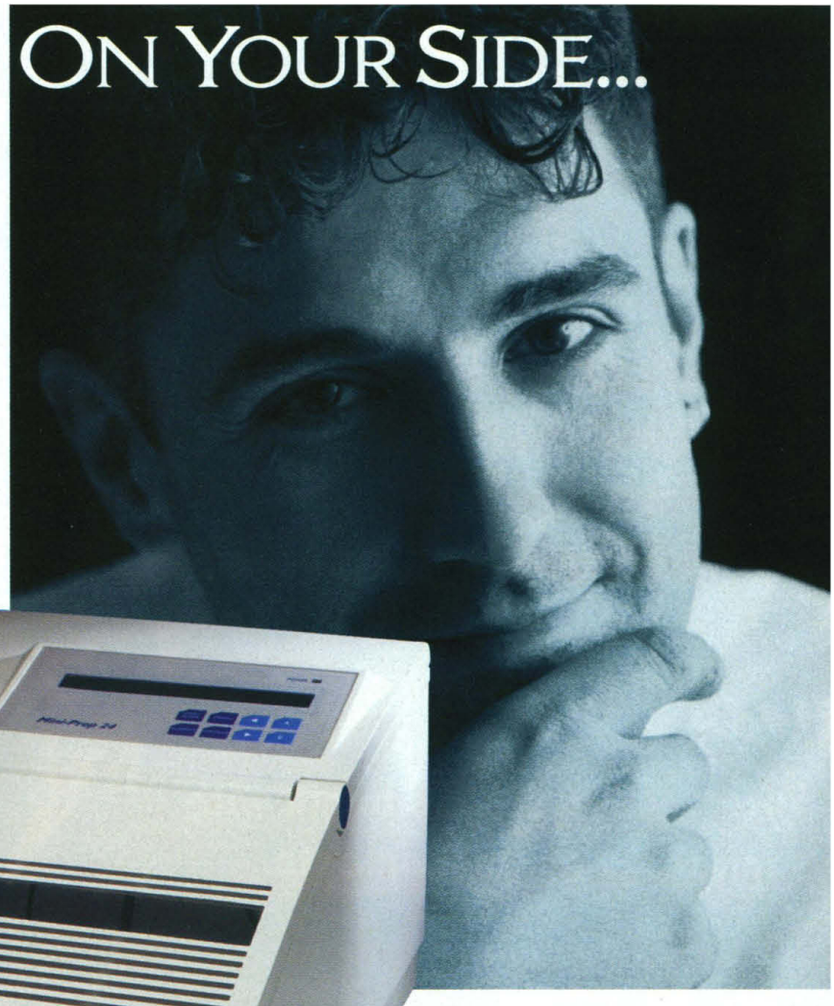

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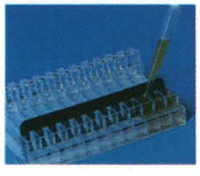

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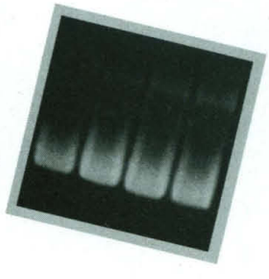

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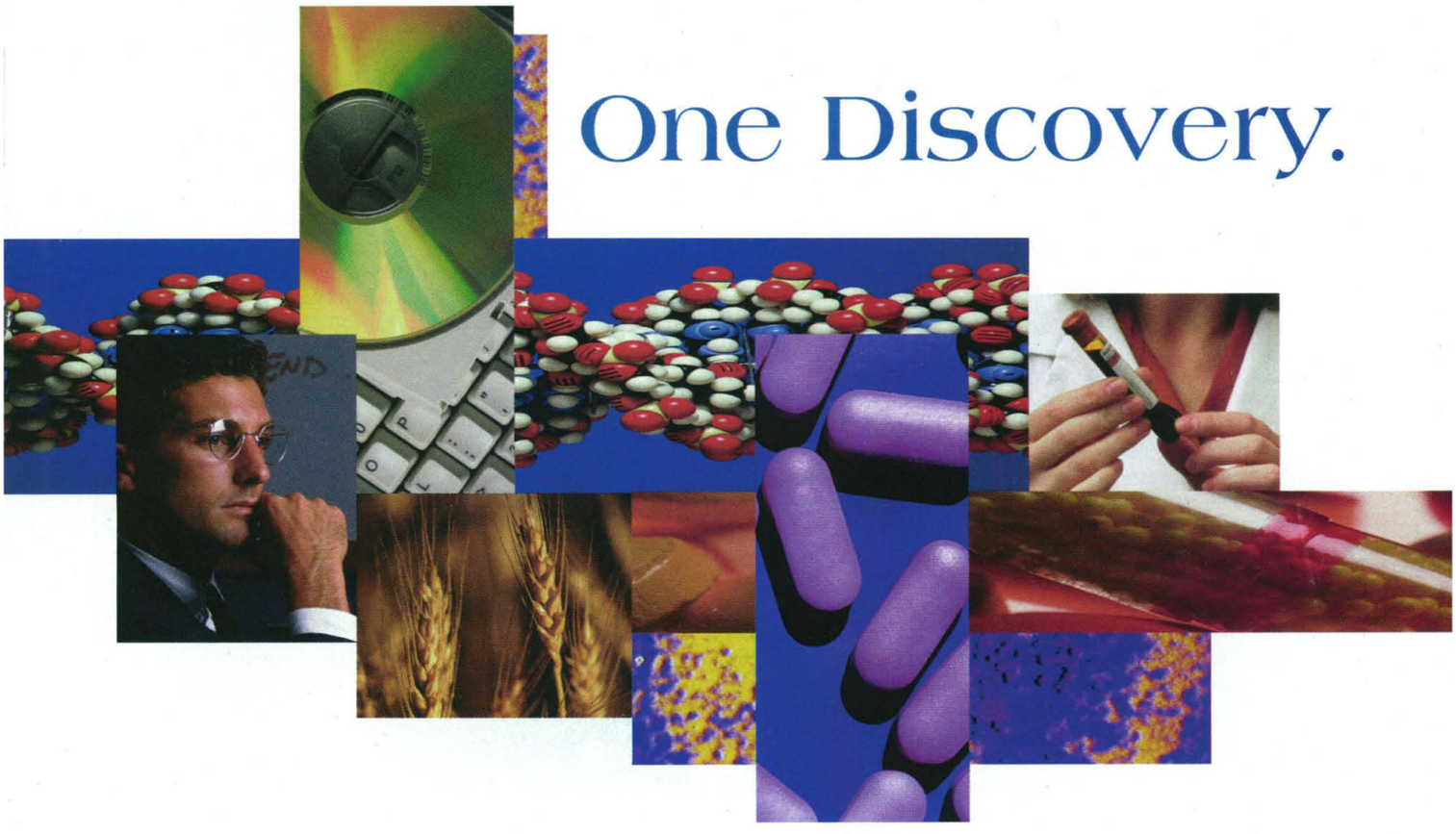

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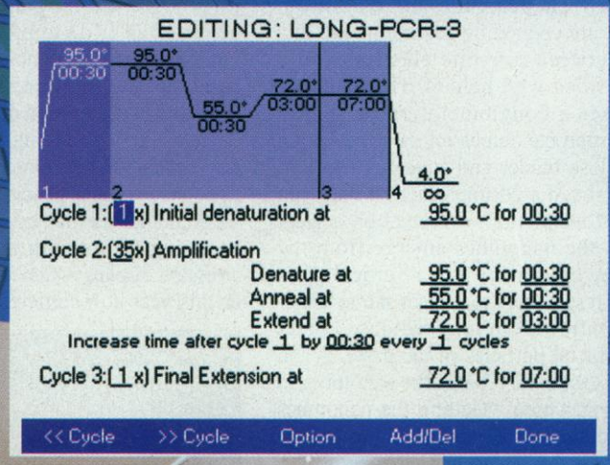

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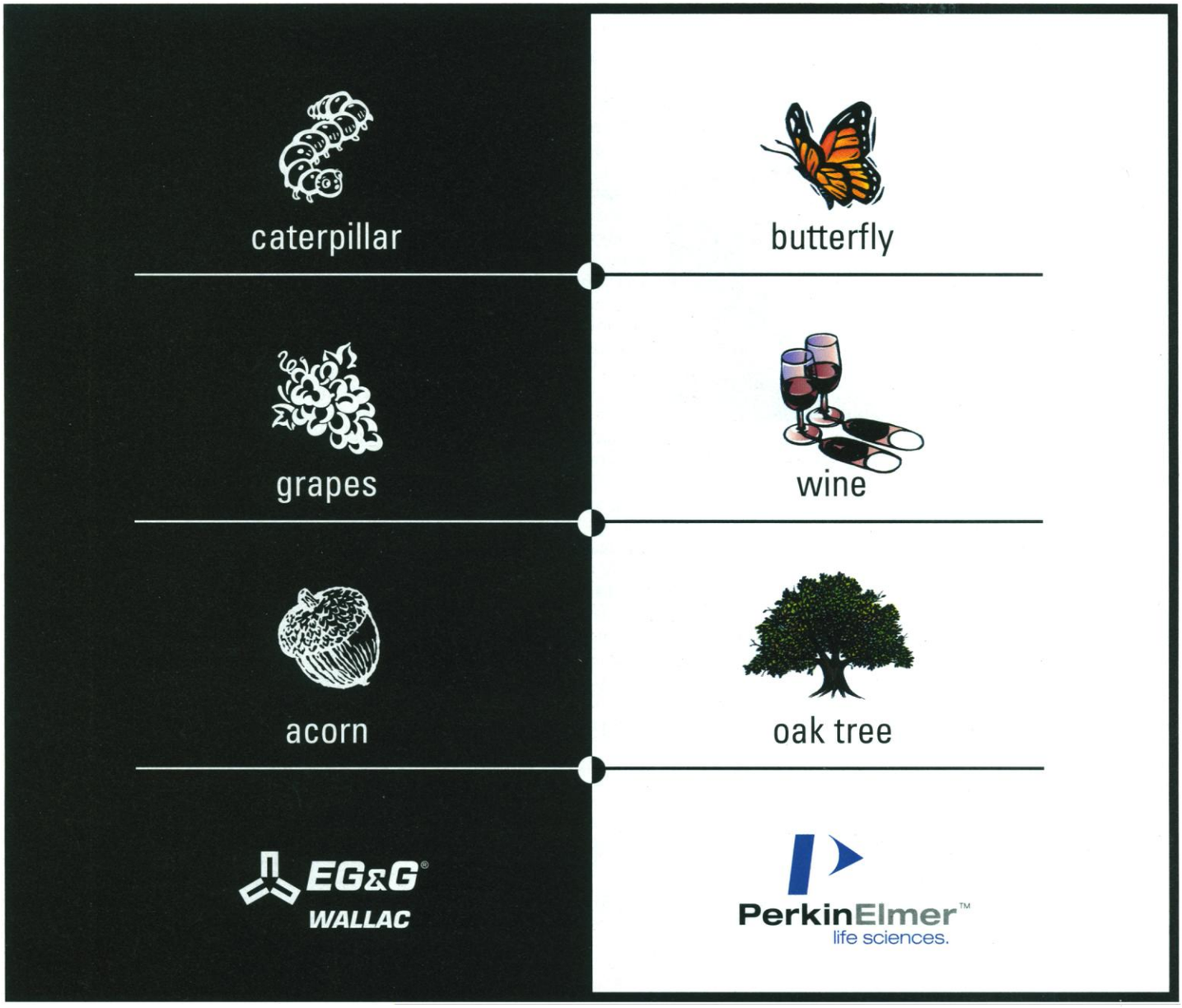

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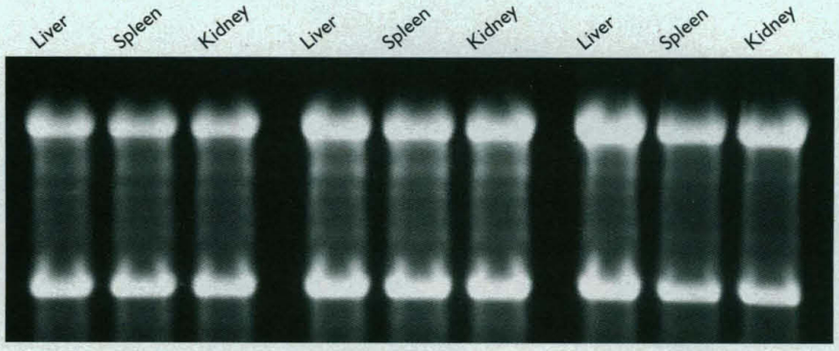

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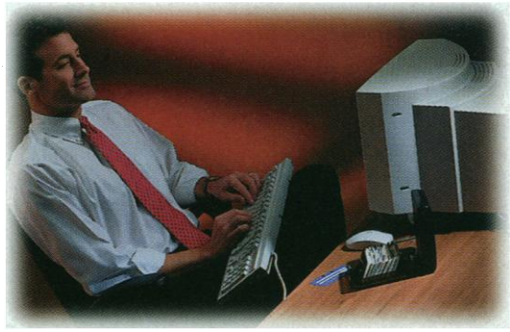

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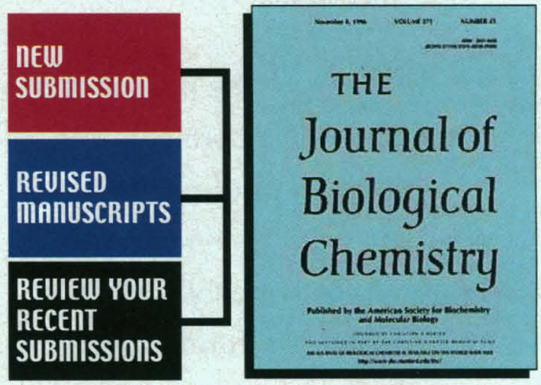

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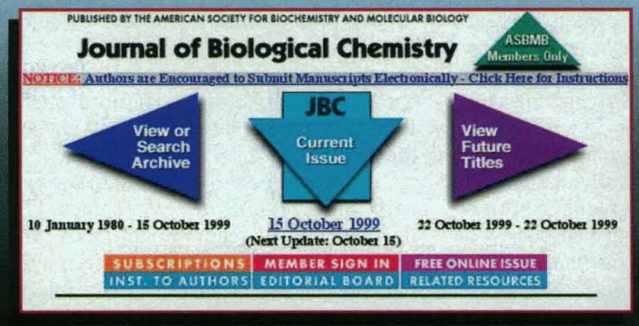

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Special Seminars

2000 Genome Seminar
Genomic Revolution in the Fields: Facing the Needs of the New Millennium

2000 AAAS Forum for School Science
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- **Poster Sessions**... covering the biological, physical, and social sciences, technology, engineering, and education.
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December 1999

The forthcoming millennial transition may be entirely arbitrary in its failure to correspond with any natural cycle. (Indeed, we can't even settle the logically unresolvable debate of whether year 2000 or 2001 begins the new millennium!) Nonetheless, if only as a reflection of our psychological need to impose human order upon natural complexity, we regard such arbitrary passages as prime occasions for taking stock of our past and trying to chart our inherently uncertain future. We can be sure of at least one cardinal fact (predicated upon an assumption that we will be able to marshall our intelligence, and our moral sensibilities, both to survive and to prevail): life and social organization in the third millennium will require increasing understanding of science and its technological achievements.

In entitling this transitional meeting "Science in an Uncertain Millennium," we wish to emphasize both this centrality and the increasing need for incorporating science in partnership with all other facets of human understanding. We shall therefore attempt to make this 2000 meeting the most international and ecumenical in our history, featuring some of the world's leading scientists and young iconoclasts of course, but also presenting speakers drawn from a broad range of nations and disciplines, including Africa's foremost woman educator, and major figures in American public administration and in arts and humanities throughout the world.

May I also make a personal plea to my fellow scientists? The AAAS Annual Meeting had long functioned as the world's finest showcase, to journalists and to the general public, for the excitement and significance of scientific discovery—a role that we must continue to maintain and strengthen. But American science has lost the valuable concept of an ecumenical gathering for the personal growth and edification of scientists—to meet with colleagues in other disciplines and to increase our own learning and understanding in fields outside our immediate expertise. The AAAS meeting is too good to stage only for others, and not to reap the direct benefits for ourselves. These two goals—a showcase for the public and a renewal for ourselves—are entirely complementary and completely reinforcing. I therefore suggest to colleagues who have not attended a AAAS meeting for many years, and who may have grown a bit cynical about the meeting's potential value for their own professional growth—take another look!

We could not ask for a better symbol, or a better practical location, for this millennial meeting than Washington, DC. Katherine Lee Bates referred to our capital when she wrote, in "America the Beautiful"—"thine alabaster cities gleam, undimmed by human tears." A bit of overblown sentiment from the gilded age, perhaps, but not a bad—and not an inaccurate—image either. Do come!

Stephen Jay Gould
President, AAAS
Alexander Agassiz Professor of Zoology, Harvard University

Lectures

Plenary Lectures

Thursday, February 17

Student Science Convocation

5:00 PM

American Junior Academy of Science Poster Displays

Opening Ceremony and Keynote Address

6:30 PM

David Satcher,
U.S. Surgeon General

Friday, February 18

Plenary Address

6:30 PM

Mamphela Ramphele,
Vice Chancellor, Univ of Cape Town

Saturday, February 19

AAAS President's Address

6:30 PM

Stephen Jay Gould,
Alexander Agassiz Professor of Zoology, Harvard Univ and AAAS

Sunday, February 20

Plenary Address

6:30 PM

Robert P. Kirshner,
Center for Astrophysics, Harvard Univ

Monday, February 21

Special Plenary

11:30 AM

The Honorable Madeleine K. Albright,*
U.S. Secretary of State

Plenary Address

6:30 PM

May Berenbaum,
Department of Entomology, Univ of Illinois

**Invited*

Topical Lectures

Friday, February 18

■ **AM Lectures (8:00AM–8:45AM)**

William E. Coyne, 3M Co
Innovation as a Growth Driver

Jaron Lanier, National Tele-Immersion Initiatives, Internet 2 Central Laboratory
Information Technologies and the Future of Scientific Method

Linda Griffith,* MIT

■ **Special PM Lecture (12:30PM–1:15PM)**

Rita R. Colwell, NSF

■ **PM Lectures (1:30PM–2:15PM)**

John P. McGovern Award Lecture:
George A. Miller, Princeton Univ
Ambiguous Language

Matthew Meselson, Harvard Univ
Averting the Hostile Exploitation of Biotechnology

G. Edward Schuh, Univ of MN
Competitiveness, Research, and Global Development: How Will the U.S. Cope?

Michael Hengartner, Cold Spg Hrbr Lab
Programmed Cell Death in the Nematode, C. elegans

Saturday, February 19

■ **AM Lectures (8:00AM–8:45AM)**

Neil de Grasse Tyson, Hayden Planetarium
Bringing the Universe Down to Earth: Designing a Planetarium for the 21st Century

Jennifer Tour Chayes, Microsoft, Inc.
What Makes Hard Problems Hard? A Physicist's View of Algorithms and Intractability

Kari Stefánsson, de Code Genetics
Population, Genomics, and Complex Traits: The Case of Iceland

Science Innovation

*Invited, not yet confirmed

■ **PM Lectures (2:00PM–2:45PM)**

Carl Djerassi, Stanford Univ
Contraception vs. Conception— A Millennial Prognosis

Edelgard Bulmahn, Min of Sci and Ed, Germany

Esther Sternberg, NIMH, NIH
Does Stress Make You Sick and Believing Make You Well? The Science of Mind-Body Connections

Sunday, February 20

■ **AM Lectures (8:00AM–8:45AM)**

John Cosgrove, Long Isl Jewish Med Cntr
Surgical History of the United States Presidents

Edward O. Wilson, Harvard Univ
The Relation Between Biology and the Humanities

Mary Lou Pardue, MIT
Drosophila Telomeres: Evolutionary Links Between Chromosome Ends and Retro-transposable Elements

■ **Special PM Lecture (1:00PM–1:45PM)**

George Whitesides, Harvard Univ and Felice Frankel, MIT
Science as Art and Art as Science

■ **PM Lectures (2:00PM–2:45PM)**

George Sarton Award Lecture:
Edward J. Larson, Univ of GA
75 Years Ago or Forever? The AAAS and the Scopes Trial

Felton Earls, Harvard Schl of Pub Hlth
Exposure to Violence in Childhood: Causes and Consequences

William A. Haseltine, Human Genome Sci, Inc.
Genes and Drugs: What to Do with All the Genes

Monday, February 21 PM

■ **PM Lectures (2:00PM–2:45PM)**

Kenneth Prewitt, U.S. Census Bureau
The Science and Politics of the U.S. Census

Tim White, UC-Berkeley
Early Hominids

2000 Genome Seminar

Genomic Revolution in the Fields: Facing the Needs of the New Millennium

Saturday, February 19
9:00AM–6:00PM

Sunday, February 20
9:00AM–6:00PM

Organized by J. Craig Venter, Celera Genomics, Barbara Jasny and Pam Hines, AAAS and *Science*

In the new millennium, the needs of the world's population are sure to increase, and yet available natural resources are expected to decrease. Genomic technology will be an important part of the solution to bridge the gap. In this third in a series of seminars co-sponsored by AAAS and TIGR, we will be highlighting exciting and late-breaking advances in applications of genomic innovations to agriculture in such areas as plant responses to pathogens and environmental stresses, building more effective or non-traditional plant or animal "factories," and improving the qualities of the produce. In considering how to use the advances of genomics in agriculture, speakers will also be discussing the sociopolitical complexities of delivering the results to the people who need them and addressing issues of public acceptance of genetic engineering technology.

Among the areas to be addressed are: Arabadopsis, sequencing, policy and funding, genomics and improvement, germplasm, stress tolerance, nutritional genomics, pest resistance, molecular evolution, meristems, BT, maize, rice, biosynthetic pathways, and much more.

Invited Genome Speakers include:

Stephen Bates, Celera Genomics, Inc
Roger Beachy, Danforth Plnt Sci Cntr
Charles Benbrook, Science & Enviro Hlth Ntwrk
The Hon. Christopher Bond,* U.S. Senate
Jeffrey L. Dangl, UNC-Chapel Hill
Dean DellaPenna, Univ of NV
Elizabeth Dennis, CSIRO
Tassos Haniotis,* European Union
Patrice Laget, European Commission
Peggy G. Lemaux, UC-Berkeley
Xiaoying Lin, TIGR
Robert Martienssen, Cold Spring Harbor Lab
Brent Mishler, UC-Berkeley
Fred Perlak, Monsanto Co
Daphne Preuss, Univ of Chicago
Ismail Serageldin,* The World Bank
Chris Somerville, Carnegie Inst of Wash
Shauna Somerville, Carnegie Inst of Wash
Scott Tingey, Dupont Ag Biotech
Michael F. Tomaschow, MSU
Virginia Walbot, Stanford Univ

**= Invited, not yet confirmed*

This Genome Seminar is co-sponsored by AAAS, *Science* magazine, and The Institute for Genomic Research (TIGR).

2000 AAAS Forum for School Science

Reforming Science and Mathematics in Urban Schools: Finding the Road to Success

Monday, February 21
8:00AM–6:30PM

Tuesday, February 22
8:00AM–1:00PM

Organized by Shirley M. Malcom, Betty Calinger, Mary Koppal, and George W. Nelson, AAAS

The Forum for School Science is a two-day seminar that mixes plenary and small group sessions featuring leading academic and policy authorities. In addition, there is a poster session and reception where Forum participants and presenters meet to network and gain more information.

The 2000 Forum will reflect on the progress of the movement to reform science and mathematics education in urban schools—much of it initiated by the National Science Foundation—and then engage participants in the discussion of unresolved issues that include: (1) how best to ensure that all students are taught science and mathematics by teachers very knowledgeable about content and pedagogy; (2) what strategies can promote learning and engagement for those students who have experienced difficulty learning mathematics and science; (3) how can school restructuring be implemented even in troubled systems; and (4) what is the "formula" for developing and maintaining supportive partnerships.

The meeting will begin with an overview of significant outcomes of urban reform efforts followed by panel presentations centered on the above issues. The panelists will have solid experience in areas that have a strong influence on the development and implementation of reform initiatives in urban schools, e.g., professional development, curriculum, research in teaching and learning, cognitive development, school/district restructuring, and the external community environment. Forum participants will engage in small group, facilitated discussion and analysis of the issues.

Invited Forum Speakers include:

Meir Ben-Hur, SkyLight Training & Publishing
Juanita Clay-Chambers,* Detroit Pub Schls
Manuel Gomez, Univ of Puerto Rico
Kati Haycock,* The Education Trust
David Hornbeck,* Schl District of Phil
Madeleine Long, The Implementation Grp
Maria Santos, San Francisco Unified Schl District
Carol Takemoto, Los Angeles Unified Schl District
Clara Tolbert,* Schl District of Philadelphia
And many others!

**= Invited, not yet confirmed*

The Forum for School Science is co-sponsored by the AAAS Directorate for Education and Human Resources and AAAS Project 2061.

Symposia at a Glance

Track	Friday	Saturday	Sunday	Monday	Tuesday
Changing Landscapes	**PM** Alien Species in Coastal Waters	**AM** Wetland Restoration **PM** China and Environmental Health	**AM** The Coevolution of Landscape and Culture **PM** Guinea Current Ecosystem	**AM** Human Impacts on Watersheds	
Communicating Science	**AM** Amateurs and Professionals **PM** Scientific Modeling of Complex Relationships	**AM** Cost of (Not) Sharing Data **PM** Legal Restrictions On Published Data		**AM** Engaging the Public in Science **PM** Science as an Error-Correcting	
Education and Public Understanding of Sci	**AM** Technology in Science Education	**AM** Teaching Mathematics to Children **PM** Teaching for Learning	**AM** Shaping Future Learning **PM** Science is Fun!		
Environment, Food, and Natural Resources	**AM** The 21st Century Food System **PM** Human Health and Climate Change Population and Environment in Coastal Areas	**AM** Who Will the World Feed? **PM** Antibiotics in Agriculture Hydrometeorological Frontiers	**AM** Sustainability Science **PM** Food and Ecological Resilience	**AM** Open Markets	**AM** Organic Agriculture Risky Microbes
Global Change/ Earth Systems Science	**AM** Climate Change and Values	**AM /PM** Hurricane Climate Research	**AM** Math Modeling in Earth Sciences **PM** Consequences of Climate Variability	**AM** Global Change: Uncertainty for Science and Democracy **PM** Human Dimensions of Global Change	**AM** Urban Sprawl from Space
Human Futures	**AM** Cyberterrorism **AM /PM** Human Resources for S&T	**AM** Critical Periods of Development: Hearing Loss **PM** Humans, Computers, and Speech	**AM** Sustainability through Science	**AM** Germline Intervention **PM** Stem Cell Controversy Production of Renewable Hydrogen	
Industry and Engineering	**AM** Can Universities Change? **PM** University Research and Industrial Performance?	**AM** Corporate Funding of Academics **PM** How Will Industry Manage Science and Technology?	**AM** R&D Performance Measurement Systems **PM** The Nutraceuticals Industry High-Tech Industry in the Region		
Interconnectivity and Life in Cyberspace		**AM** Found in Cyberspace **PM** Science and Health Information	**AM** Battling the Crypto Wars **PM** From Small-World Networks to the Web	**AM** Paperless Publishing **PM** Research, Education, and the Web	
Life Science and the Science of Life	**AM** Amphibian Declines	**AM** Understanding Ecosystems The Role of Water for Life **PM** Ecosystem Services	**AM** Sociality Among Primates **PM** Genes, Genomics, and Complex Ecosystems	**AM** Restoring Ecosystems Impacted by Fisheries **PM** Endangered Species Recovery	
Looking Back to Forecast the Future	**AM** Unearthing Climate Variability **PM** Peopling of the New World	**AM** Scientist's Workstations: 21st Century Expectations	**AM** Ecological Forecasting **PM** Anticipating S&T's Futures	**PM** Plants, Population and Welfare	

Track	Friday	Saturday	Sunday	Monday	Tuesday
Looking Beyond Earth	**AM** Space Access and Utilization **PM** Mars Exploration	**AM** First Light From CHANDRA Unpredictable Natural Events **PM** Space Weather	**AM** The Future of the Sun **PM** Supermassive Black Holes		
Mathematics and Physical Science	**AM** Mathematics in Hollywood and Life **PM** Paradigms for the 21st Century	**PM** Spintronics Predicting More Assuming Less	**AM** Cosmology **PM** Neutrino Experiments	**AM** Synthetics, Nanofabrication, and Mol Med **PM** Magic of Matter Waves	
Natural History in the New Millennium	**PM** Integrated Science	**PM** Ethnobotany/Bioprospecting	**AM /PM** Sociobiology		
Public Health and Medicine	**AM** New Knowledge on Homocyst(e)ine **PM** About Faces Prophylaxis or Therapy	**AM** Chocolate Infections and Illicit Drug Abuse **PM** Eradication of Polio	**AM** Health Care, Economics, and Technology **PM** Genome Strategies in Evolution and Disease Pain 2000	**AM** Dietary Salt Improving Medical Decision Making **PM** Does Nicotine have Beneficial Effects? International Management of DDT	**AM** Children and Chronic Diseases
Science and Society	**PM** The Science of Baseball Three Jobs–Two People	**AM** Analysis of Electronic Threats **PM** Technology and Inequality	**AM** Bio Music Violent Crime and Punishment **PM** Ethnic Restaurants in DC Criminal Punishment of Adolescents	**AM** Enviroshock Symmetry and Hierarchy **PM** Dynamics of Social Interactions Evolution, Science, and Society	**AM** Finding Landmines
Science, Engineering, and Public Policy	**AM** Geoscience and Geophilosophy Weapons of Mass Destruction **PM** The Mathematics of Politics	**AM** Sci Collaboration in Cuba **AM /PM** The Precautionary Principle	**AM** Scientists on Capitol Hill	**AM** Science at State **PM** "Science Savvy" at State	**AM** S&T Roadmaps
Science Innovation	**AM** Drosophila Genome Millennial Mind **PM** Development of the Brain	**AM** Neurogenesis **PM** Cognitive Memory	**AM** Drug Discovery Nanotechnology **PM** The New Era of Genomics The Thinking, Feeling Brain	**AM** Cancer Therapeutics	
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