1852

Everglades in peril

1865

AAAS Meetings
AAAS'93
11–16 February 1993
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Preliminary Program
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1860 & 1933

Analysis of ancient DNA

DEPARTMENTS

THIS WEEK IN SCIENCE

1841

EDITORIAL

Instrumentation: J. I. Brauman

LETTERS


SCIENCESCOPE

Knockout punch to Kaon Factory?

RANDOM SAMPLES

1866

Soviet Biowarfare Apparatus: All Gone! • Newest, Largest Marine Sanctuary • Toshiba and Teachers Launch Contest • Neuroscience and Mental Illness • The Anatomy of Scientific Productivity • Monkeying With NSF's Basic Mission?

INSIDE AAAS

1962

BOOK REVIEWS

1975

Against the Odds, reviewed by W. K. Mariner • Images of Materials, F. W. Gayle • A Passion for Physics, W. Moore • Vignettes: Performance Tests • Books Received

PRODUCTS & MATERIALS

1983

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on May 21, 2017
Atomic force micrograph of a living cell, showing filamentous actin and other internal cellular structures. The ability of the atomic force microscope to "see" inside living cells, coupled with its potential for very high resolution imaging, may make this and related instruments powerful tools for molecular cell biology. See page 1944 and the special section on instrumentation beginning on page 1885. [Micrograph: E. Henderson]

ARTICLES

INSTRUMENTATION
Weighing Naked Proteins: Practical, High-Accuracy Mass Measurement of Peptides and Proteins 1885
B. T. Chait and S. B. H. Kent
Detection of Trace Molecular Species 1894
Using Degenerate Four-Wave Mixing
R. L. Farrow and D. J. Rakestraw
From Molecules to Cells: Imaging Soft 1900
Samples with the Atomic Force Microscope
M. Radmacher, R. W. Tillmann, M. Fritz, H. E. Gaub
The Cytosensor Microphysiometer: 1906
Biological Applications of Silicon Technology
Ultrafast Infrared Spectroscopy 1913
P. O. Stoutland, R. B. Dyer, W. H. Woodruff

RESEARCH ARTICLE
Interactions of Small Nuclear RNA's with Precursor Messenger RNA During in Vitro Splicing 1918
D. A. Wassarman and J. A. Steitz

REPORTS
Comet Yanaka (1988r): A New Class of Carbon-Poor Comet 1926
U. Fink
Miocene Fossil Hominids and the Chimp-Human Clade 1929
D. R. Begun

DNA Sequences from a Fossil Termite 1933
in Oligo-Miocene Amber and Their Phylogenetic Implications
R. DeSalle, J. Gatesy, W. Wheeler, D. Grimaldi
Measurement of Quantum Tunneling 1937
Between Chiral Isomers of the Cyclic Water Trimer
N. Fugliano and R. J. Saykally
Discovery of a Peptide-Based Renin 1940
Inhibitor with Oral Bioavailability and Efficacy
Actin Filament Dynamics in Living Glial Cells Imaged by Atomic Force Microscopy 1944
E. Henderson, F. G. Haydon, D. S. Sakaguchi
Multiple Zinc Finger Forms Resulting from Developmentally Regulated Alternative Splicing of a Transcription Factor Gene 1946
T. Hsu, J. A. Gogos, S. A. Kirsh, F. C. Kafatos
Sequence Discrimination by Alternatively 1951
Spliced Isoforms of a DNA Binding Zinc Finger Domain
J. A. Gogos, T. Hsu, J. Bolton, F. C. Kafatos
Inactivation of the p34[42]-Cyclin B 1955
Complex by the Human WEE1 Tyrosine Kinase
L. L. Parker and H. Piwnica-Worms
Association of Human Cyclin E with a 1958
Periodic G-S Phase Protein Kinase
V. Dulić, E. Lees, S. I. Reed

1894
Spectroscopic subtleties: for other advances in instrumentation, see pages 1885 to 1917

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