NEWS AND COMMENT

- Everglades Rebound From Andrew 1852
- Gene Therapy: Monkey Tests Spark Safety Review 1854
- AIDS Patent Dispute: U.S. Officials Say Non on Royalties 1855
- Gene Patents: Rumors Fly Over Rejection of NIH Claim 1855
- New French Biomedical Center Breaks the Mold 1856
- Agencies Split on Nutrition Advice 1857

1852

Everglades in peril

1860 & 1933

Analysis of ancient DNA

DEPARTMENTS

THIS WEEK IN SCIENCE 1841
- Soviet Biowarfare Apparatus: All Gone!
- Largest Marine Sanctuary
- Toshiba and Teachers Launch Contest
- Neuroscience and Mental Illness
- The Anatomy of Scientific Productivity
- Monkeying With NSF's Basic Mission?

EDITORIAL 1843
- Instrumentation: J. I. Brauman

LETTERS 1845
- Hydrocoral Species Not Extinct: P. W. Glynn and J. S. Feingold
- Lyme Disease: Asking the Right Questions: C. Brenner
- Enantiomerically Pure Drugs: J. M. Brown
- HIV-Free AIDS Reports: P. Duesberg
- Population Genetics: Founding Fathers: D. R. Govindaraju

SCIENCESCOPE 1851
- Knockout punch to Kaon Factory?
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 144 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
B. T. Chait and S. B. H. Kent

Detection of Trace Molecular Species
Y. R. Farrow and D. J. Rakestraw

Using Degenerate Four-Wave Mixing
R. L. Farrow and D. J. Rakestraw

From Molecules to Cells: Imaging Soft Materials
M. Radnacher, R. W. Tillmann, M. Fritz, H. E. Gauß

The Cytosensor Microphysiometer: Biological Applications of Silicon Technology

Ultrafast Infrared Spectroscopy
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
D. A. Wasserman and J. A. Steitz

REPORTS

Comet Yanaka (1988r): A New Class of Carbon-Poor Comet
U. Fink

Miocene Fossil Hominids and the Chimp-Human Clade
D. R. Begun

DNA Sequences from a Fossil Termite
in Oligo-Miocene Amber and Their Phylogenetic Implications
R. DeSalle, J. Gatesy, W. Wheeler, D. Grimaldi

Measurement of Quantum Tunneling Between Chiral Isomers of the Cyclic Water Trimer
N. Fugliano and R. J. Saykally

Discovery of a Peptide-Based Renin Inhibitor with Oral Bioavailability and Efficacy

Actin Filament Dynamics in Living Glial Cells Imaged by Atomic Force Microscopy
E. Henderson, F. G. Haydon, D. S. Sakaguchi

Multiple Zinc Finger Forms Resulting from Developmentally Regulated Alternative Splicing of a Transcription Factor Gene
T. Hsu, A. Gogos, S. A. Kirsh, F. C. Kafatos

Sequence Discrimination by Alternatively Spliced Isomers of a DNA Binding Zinc Finger Domain
J. A. Gogos, T. Hsu, J. Bolton, F. C. Kafatos

Inactivation of the p34<sup>cdc2</sup>-Cyclin B Complex by the Human WEE1 Tyrosine Kinase
L. L. Parker and H. Piwnica-Worms

Association of Human Cyclin E with a 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