

1531 This Week in *Science*

Editorial

1533 A New Approach to Faculty Salaries

Letters

1535 Vitamin C Papers: L. PAULING ■ Native Plants: Conservation Priorities: R. ORNDUFF ■ Teaching Machines: B. F. SKINNER ■ Boreal Forests and the Global Carbon Cycle: P. KAUPPI AND M. POSCH ■ La Différence: R. FISCHER

News & Comment

1541 Spy Satellites: Entering a New Era
1542 Culliton Named to New Post
1543 DOD Lists Critical Technologies
1544 EPA's Plan for Cooling the Global Greenhouse
1545 German Computer Spy Ring Broken
Fraud Review May Be Taken from NIH
Next Science Adviser?
1546 Japan Lays Out Welcome Mat for U.S. Scientists
1547 Psychiatrists Examine Soviet System
1548 European Genome Program Delayed?
Marchuk Admits Flaws in Election
Bonn Launches Wind Energy Experiment ■ . . . Britain Picks Site for Wind Farm

Research News

1549 Limits to DNA Fingerprinting ■ Check on *Fingerprint News*
1551 Drug-Resistant Strains of AIDS Virus Found
1552 Treasuring the Moon for 20 years
1553 Is Risk Assessment Conservative?
Pulsar, Pulsar, Where Art Thou, Pulsar?
1554 New Equipment Roundup Dazzles Scientists: The Pittcon Experience ■ Crime and Chemical Analysis ■ Probing the Chemistry of the Brain ■ The Outlook for the Equipment Industry

Articles

1557 Star Formation in Irregular Galaxies: D. A. HUNTER AND J. S. GALLAGHER, III
1564 Signal Transduction by the Platelet-Derived Growth Factor Receptor:
L. T. WILLIAMS

Research Articles

1571 Topology and Formation of Triple-Stranded H-DNA: H. HTUN AND
J. E. DAHLBERG
1576 A Multiubiquitin Chain Is Confined to Specific Lysine in a Targeted Short-Lived Protein: V. CHAU, J. W. TOBIAS, A. BACHMAIR, D. MARRIOTT, D. J. ECKER,
D. K. GONDA, A. VARSHAVSKY

Reports

1584 Radar Detection of Phobos: S. J. OSTRO, R. F. JURGENS, D. K. YEOMANS,
E. M. STANDISH, W. GREINER

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COVER The rose sea anemone (*Tealia piscivora*) exemplifies the beauty of many cnidarians, the simplest animals having a nervous system. Tentacles of the cosmopolitan anemone (*Haliplanella luciae*) have mechanoreceptors on the surface that tune to the movements of prey identified by chemodetection. See page 1589. [Photograph by George Grall, National Aquarium, Baltimore, MD 21202]

- 1586 Imaging Crystals, Polymers, and Processes in Water with the Atomic Force Microscope: B. DRAKE, C. B. PRATER, A. L. WEISENHORN, S. A. C. GOULD, T. R. ALBRECHT, C. F. QUATE, D. S. CANNELL, H. G. HANSMA, P. K. HANSMA
- 1589 Cnidocyte Mechanoreceptors Are Tuned to the Movements of Swimming Prey by Chemoreceptors: G. M. WATSON AND D. A. HESSINGER
- 1591 Major Enhancement of the Affinity of an Enzyme for a Transition-State Analog by a Single Hydroxyl Group: W. M. KATI AND R. WOLFENDEN
- 1593 Direct Measurements of Sliding Between Outer Doublet Microtubules in Swimming Sperm Flagella: C. J. BROKAW
- 1596 Histamine Is an Inter cellular Messenger Mediating Platelet Aggregation: S. P. SAXENA, L. J. BRANDES, A. B. BECKER, K. J. SIMMONS, F. S. LABELLA, J. M. GERRARD
- 1600 Activation of the Cellular Proto-Oncogene Product p21Ras by Addition of a Myristylation Signal: J. E. BUSS, P. A. SOLSKI, J. P. SCHAEFFER, M. J. MACDONALD, C. J. DER
- 1603 Activity-Dependent Enhancement of Presynaptic Inhibition in *Aplysia* Sensory Neurons: S. A. SMALL, E. R. KANDEL, R. D. HAWKINS
- 1606 Directed Movement of Latex Particles in the Gynocia of Three Species of Flowering Plants: L. C. SANDERS AND E. M. LORD
- 1608 Commitment of Neural Crest Cells to the Sensory Neuron Lineage: M. SIEBER-BLUM
- 1611 Indole-2-Carboxylic Acid: A Competitive Antagonist of Potentiation by Glycine at the NMDA Receptor: J. E. HUETTNER

Technical Comments

- 1613 Asymmetries of Clade Shape and the Direction of Evolutionary Time: N. L. GILINKSY, S. J. GOULD, R. Z. GERMAN; J. A. KITCHELL AND N. MACLEOD ■ Possible Role of Carbamates in Neurotoxicity and Neurotransmitter Inactivation: E. A. MROZ; J. W. WEISS AND D. W. CHOI

Meetings

- 1616 *Gordon Research Conferences: Application Form*

Book Reviews

- 1617 Neurobiology of Neocortex, reviewed by: S. P. WISE ■ Africanized Honey Bees and Bee Mites, E. E. LINDQUIST ■ Geomorphology and Hydrology of Karst Terrains, A. L. BLOOM ■ Thermal History of Sedimentary Basins, G. DEV. KLEIN ■ Books Received

Products & Materials

- 1621 Peristaltic Pump ■ Database Accepts Handwritten Data ■ Database of Journal Contents ■ X-ray Dispersive Microanalytical System ■ Buffer Pads for Semidry Blotting ■ Chromatography Integrator ■ Taq DNA Polymerase ■ HPLC Autosampler ■ Literature

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