LETTERS
Animal Feeds: Effect of Antibiotics: J. D. Dingell; Analytical Chemistry Techniques: J. M. Petruzzi; Multiyear Funding Authorization: L. C. Allen

EDITORIAL
What to Expect from Gerontological Research?: F. C. Ludwig

ARTICLES
Spaceborne Imaging Radar: Geologic and Oceanographic Applications: C. Elachi
Phospholipid Methylation and Biological Signal Transmission: F. Hirata and J. Axelrod
Research and Development, Productivity, and Inflation: E. Mansfield

NEWS AND COMMENT
Doubts Mounting About All-Volunteer Force
Briefing: Rational Suicide; Not What You Know but Where You're From; House Report Nails AEC for Sheep Deaths
Is There a Catch to Innovation?
Nitrites: FDA Beats a Surprising Retreat
NAS and Sakharov
DNA: Chapter of Accidents at San Diego

RESEARCH NEWS
Vaccinating with Bacterial Pili
Cornell Evidence for Fifth Quark

AAAS NEWS
Summer Meetings: Pacific Division, AAAS Affiliates, and Interciencia; Call for Nominations: 1981 General Election; ANZAAS Holds Jubilee Congress; Proposals and Resolutions Invited for 1981 Council Meeting; AAAS
Membership Recruitment Concerns: Carol L. Rogers; CSFR Meeting; Science and the Public of Interest to Chinese Delegation; 1979 AAAS Summary Financial Statements

ANNUAL MEETING

Science and Technology: Bridging the Frontiers

BOOK REVIEWS

Zoogeography and Diversity of Plankton, reviewed by B. W. Frost; Comparative Studies of the Courtship and Mating Behavior of Tropical Araneid Spiders, B. D. Opell; Secondary Plant Products, G. R. Waller; Cellular Interactions in Symbiosis and Parasitism, J. J. Lee; Books Received

REPORTS

Mount St. Helens Ash from the 18 May 1980 Eruption: Chemical, Physical, Mineralogical, and Biological Properties: J. S. Fruchter et al.

Composition of the Mount St. Helens Ashfall in the Moscow-Pullman Area on 18 May 1980: P. R. Hooper et al.

Gravitropism in Plant Stems May Require Ethylene: R. M. Wheeler and F. B. Salisbury

J Genes for Heavy Chain Immunoglobulins of Mouse: N. Newell et al.

Electrical Stimulation of the Midbrain Mediates Metastatic Tumor Growth: R. H. Simon et al.

Flavin Adenine Dinucleotide-Dependent Monooxygenase: Its Role in the Sulfoxidation of Pesticides in Mammals: N. P. Hajjar and E. Hodgson

Serial Female Sex Changes After Simultaneous Removal of Males from Social Groups of a Coral Reef Fish: D. Y. Shapiro

Alterations in Brain Norepinephrine Metabolism Induced by Environmental Stimuli Previously Paired with Inescapable Shock: G. Cassens et al.

Contextual Effects in Infant Speech Perception: P. D. Eimas and J. L. Miller

Gastrin Injected into the Lateral Hypothalamus Stimulates Secretion of Gastric Acid in Rats: B. L. Tepperman and M. D. Evered


COVER

Eruption of Mount St. Helens, 18 May 1980, 8:32 a.m., Pacific Daylight Time. Data are from NOAA/6, orbit 4635, about 90 minutes later, supplied by National Environmental Satellite Service, Redwood City, California. Image produced by IBM Scientific Center, Palo Alto, California. See page 1116 and box on page 1124. [First-time publication courtesy of IBM, © IBM 1980]