LETTERS
Energy Options: C. Komanoff; Bites and Stings: M. A. Mayse; Wrong Huxley: R. D. Dietz; N. L. Gonzalez .......................... 494

EDITORIAL
U.S. Space Science and Technology: J. A. Van Allen .......................... 495

ARTICLES
Summer Ice and Carbon Dioxide: G. Kukla and J. Gavin .......................... 497
Journey to the Center of the Cell: Role of the Receptosome: I. H. Pastan and M. C. Willingham .......................... 504
Biological Classification: Toward a Synthesis of Opposing Methodologies: E. Mayr ........................................... 510
1981 Nobel Prize for Physiology or Medicine: M. S. Gazzaniga; J. Y. Lettvin .......................... 517
1981 Nobel Prize in Economics: P. A. Samuelson ........................................... 520

NEWS AND COMMENT
Seeking Redress for Nikola Tesla ........................................... 523
New IOM Members ........................................... 524
EPA May Be Redefining Toxic Substances ........................................... 525
Briefing: Handler Receives Medal of Science; Gilbert May Leave Harvard for Biogen; Selling the Public on Nuclear Power; EPA Administrator Mum on Future Cuts ........................................... 526
A Seismological Shoot-out at Diablo Canyon ........................................... 528

RESEARCH NEWS
New Reports of a Human Leukemia Virus ........................................... 530

ANNUAL MEETING
A Welcome to Washington: R. Berendzen; Preconvention Program; Support of Scientific Research in the '80s; Schedule of Contributed Papers; Meeting Information; Advance Registration and Hotel Reservation Forms ........................................... 532
BOOK REVIEWS

Autoshaping and Conditioning Theory, reviewed by P. Killeen; The Framingham Study, H. Blackburn; Microbial Cell Walls and Membranes, F. C. Neuhau; Sedimentation in Oblique-Slip Mobile Zones, J. F. Dewey; Ocean Dumping of Industrial Wastes, J. W. Farrington; Books Received...

REPORTS


X-ray Absorption Spectroscopic Investigation of Trace Vanadium Sites in Coal: D. H. Mayolte et al. ................................. 554


Effect of Indomethacin on Intestinal Tumors Induced in Rats by the Acetate Derivative of Dimethylolrosamine: M. Pollard and P. H. Luckert .................................................. 558


Dietary Restriction Retards the Age-Associated Loss of Rat Striatal Dopaminergic Receptors: P. Levin et al. ................................. 561

Differentiation of Respiratory and Abortive Isolates of Equine Herpesvirus 1 by Restriction Endonucleases: M. J. Studdert, T. Simpson, B. Roizman ................................. 562

Induction of Invagination in Insect Embithelium: Paradigm for Embryonic Invagination: J. B. Nardi ........................................... 564

The Complement System of the Nurse Shark: Hemolytic and Comparative Characteristics: J. A. Jensen et al. ................................. 566

DNA Synthesis in Cultured Adult Cardiocytes: M. Cantin et al. ................................. 569

Cerebral Cortex Responds Rapidly to Thyroid Hormones: J. L. Leonard et al. ........................................... 571

Persistent Behavior at High Rates Maintained by Intravenous Self-Administration of Nicotine: S. R. Goldberg, R. D. Spealman, D. M. Goldberg ................................. 573

Acoustic Communication and Reproductive Isolation in Two Species of Wolf Spiders: G. E. Straton and G. W. Uetz ................................. 575

Ganglioside Stimulation of Axonal Sprouting in vitro: F. J. Roisen et al. ........................................... 577

Regeneration of Neurites in Long-Term Cultures of Sympathetic Neurons Deprived of Nerve Growth Factor: R. B. Campenot ................................. 579

Brain Aging Correlates: Retardation by Hormonal-Pharmacological Treatments: P. W. Landfield, R. K. Baskin, T. A. Piller ........................................... 581

AN J. HARRISON, ALBERT E. MASSEY, RUSSEL A. PETERSON, HARRETT ZUCKERMAN, WILLIAM T. GOLDEN, WILLIAM D. CAREY

IOLOGY AND GEOGRAPHY (E) | BIOLOGICAL SCIENCES (G) | ANTHROPOLOGY (H)

A. Simon | John A. Moore | Alan R. Beals

THOMAS D. O'TOOLE | Walter Chavin | PRACILLA REING

EDUCATION (N) | AGRICULTURE (O) | INDUSTRIAL SCIENCE (P)

W. D. Boedonoff | Martin A. Masseye | Johan D. dello

STATISTICS (U) | COYDT T. Wilson | ROBERT L. STEIN

A. A. Plenbger | Julius London | HERMAN POLATZ

Hra Trusdell | Glenn R. Hilt | S. Fred Senger

The American Association for the Advancement of Science was founded in 1848 and incorporated in 1874. Its object is to further the work of scientists, to facilitate cooperation among them, to foster scientific freedom and responsibility, to improve the effectiveness of science in the promotion of human welfare, and to increase public understanding and appreciation of the importance and promise of the methods of science in human progress.

COVER

Science 214 (4520), 494-585.