607 This Week in Science

Editorial

609 The Willingness to Risk Failure: H. T. Shapiro

Letters


News & Comment

614 Key Primate Research Institute Flounders
617 Final Verdict on Science Budget: Not Bad at All
618 How Geography Boosted DOE's Budget Sick Fix for Hubble Space Telescope?
619 Does Medical Mystery Threaten Biotech?

Research News

622 Gerontology Research Comes of Age ■ A New Bestiary for Aging Research
626 Putting Chaos to Work
628 How African Are “Killer” Bees? Saturn Mission Backed, Europeans Relieved
629 Materials Tips from Sea Urchins

Perspective


Articles

634 In Search of Methuselah: Estimating the Upper Limits to Human Longevity: S. J. Olshansky, B. A. Carnes, C. Cassel
640 The Interdiffusion of Polymers: J. Klein

Research Articles

646 A Thermodynamic Scale for the Helix-Forming Tendencies of the Commonly Occurring Amino Acids: K. T. O'Neil and W. F. DeGrado
651 Protein Splicing Converts the Yeast TFPI Gene Product to the 69-kD Subunit of the Vacular H+ Adenosine Triphosphatase: P. M. Kane, C. T. Yamashiro, D. F. Wolczynk, N. Neff, M. Goebli, T. H. Stevens

Reports

The Virginia opossum on the cover comes from a long-lived population on Sapelo Island, Georgia, that is being used to study mammalian aging. New animal models are an important part of current gerontology research (see news stories on page 622). Research on aging processes is critical, because even cures for heart disease and cancer probably would have little effect on overall life expectancy (see article on page 634). [Photograph by David Scott]

667 The Origin of Crustacean Biramous Appendages and the Evolution of Arthropoda: M. J. EMERSON and F. R. SCHRAM


673 Increased Activity of Calcium Leak Channels in Myotubes of Duchenne Human and mdx Mouse Origin: P. FONG, P. R. TURNER, W. F. DÉNÉTCLAW, R. A. STENHARDT

676 An Unusual Form of Lipid Linkage to the CD45 Peptide: A. TAKEDA and A. L. MAIZEL

679 Expression of Murine CD1 on Gastrointestinal Epithelium: P. A. BLEICHER, S. P. BALK, S. J. HAGEN, R. S. BLUMBERG, T. J. FLOTTE, C. TERHORST

682 Down-Regulation of LFA-1 Adhesion Receptors by C-myc Oncogene in Human B Lymphoblastoid Cells: G. INGHIRAMI, F. GRIGNANI, L. STERNAS, L. LOMBARDI, D. M. KNOWLES, R. DALLA-FAVERA

686 An Organ-Specific Differentiation Gene, pha-1, from Caenorhabditis elegans: H. SCHNABEL and R. SCHNABEL

688 Changes in Sodium Channel Gating Produced by Point Mutations in a Cytoplasmic Linker: J. R. MOORMAN, G. E. KIRCH, A. M. BROWN, R. H. JOHO


695 Fang Lizhi Heads List of Plenary Speakers Set for 1991 AAAS Annual Meeting ■ AAAS Forum on School Science Convenes in Washington Next Week ■ Science Journalists Selected for Awards ■ New Photo Exhibit Examines Threatened Rainforest ■ Delegate Needed for Bangladesh Meeting ■ Resources Available on Education Issues ■ Workshop to Focus on Ethics, Values ■ How to Apply for the Minority Ethics and Values Workshop ■ Policy Changes Affect Back Issues ■ Member Donations Aid AAAS Efforts ■ AAAS Washington Fellows Place Scientists, Engineers in Year-Long Assignments on Science, Diplomacy and Security

699 Science and the Soviet Social Order, reviewed by: J. BROOKS ■ The Chemical Industry in the USSR, R. W. CAMPBELL ■ Thirst and Sodium Appetite, J. T. FITZSIMONS ■ Supernovae, S. VAN DEN BERGH ■ Books Received

704 Cooling Block for Microcentrifuge Tubes ■ Microwave Sterilizers for Microbiological Media ■ Microprotein Analyzer ■ High- and Low-Temperature Chamber ■ Low-Volume Ultrafiltration Device ■ Cleaveable Peptide Kit ■ Kit for Rapid Isolation of Messenger RNA ■ Literature
Science 250 (4981), 607-704.