115 This Week in Science

Editorial

117 Sustainable Future for Planet Earth

Letters

118 British Popular Science: "Prizeworthy": M. RODGERS Munk's Experiment: R. REVELLE; M. J. MULROY

ScienceScope

127 Keeping a lid on the Gallo report; bearing down on NASA contractors; etc.

News & Comment

128 A Culture Clash Over Big Science $2 Billion for the SSC? Sayonara, but Thanks for Asking
131 Military Labs Hit by Funding Retreat
132 A Tangle of Superconductor Patent Disputes
133 Will GOES-NEXT Go Next?

Research News

134 Geothermal Tragedy of the Commons The Back Burner of Geothermal Energy
136 RNA Editing: What's in a Mechanism?
138 A Long, Hard Look at the Virgo Cluster Looking Toward the Edge
140 Manifest Destiny at the Scripps Research Institute
143 Briefing: Risqué Relics Dawn of a Micromachine Age? Skylab Rides Again A Fortunate Few Get Pews

Perspective

144 Oct-3 and the Beginning of Mammalian Development: M. H. ROSNER, M. A. VIGANO, F. W. J. PIGBY, H. ARNHEITER, L. M. STAUBLI

Articles

152 Advances in Helioseismology: K. G. LIBBRECHT AND M. F. WOODARD
157 Messenger RNA Splicing in Yeast: Clues to Why the Spliceosome Is a Ribonucleoprotein: C. GUTHRIE

Research Article

164 A Method to Identify Protein Sequences That Fold into a Known Three-Dimensional Structure: J. U. BOWIE, R. LÜTHY, D. EISENBERG

Reports

173 Field-Induced Nanometer- to Atomic-Scale Manipulation of Silicon Surfaces with the STM: I.-W. LYO AND P. AVOURIS
COVER  The parasitic ciliate Lambornella clarki, flanked by free-living protozoa and surrounded by larvae and pupae of its mosquito host, Aedes sierrensis. The impact of fatal L. clarki infections on host populations in treeholes varies with food availability and can result in greater host abundance and fecundity when resources are scarce. See page 185. [Illustration by Jan O. Washburn; color tinting by Julie Cherry]

176 Rapid Eruption of the Siberian Traps Flood Basalts at the Permo-Triassic Boundary: P. R. REENNE AND A. R. BASU
179 Solution Structures of β Peptide and Its Constituent Fragments: Relation to Amyloid Deposition: C. J. BARROW AND M. G. ZAGORSKI
189 Prospects for an Invasion: Competition Between Aedes albopictus and Native Aedes triseriatus: T. P. LIVDAHL AND M. S. WILLEY
191 Structural Features That Give Rise to the Unusual Stability of RNA Hairpins Containing GNRA Loops: H. A. HEUS AND A. PARDI
194 Organizer-Specific Homebox Genes in Xenopus laevis Embryos: B. BLUMBERG, C. V. E. WRIGHT, E. M. DE ROBERTIS, K. W. Y. CHO
197 Function of the Homeodomain Protein GHF1 in Pituitary Cell Proliferation: J.-L. CASTRILLO, L. E. THEILL, M. KARIN
199 MHC Class I Deficiency: Susceptibility to Natural Killer (NK) Cells and Impaired NK Activity: N.-S. NGO, M. BIX, M. ZIJLSTRA, M. JAENISCH, D. RAULET
205 Effect of Deleting the R Domain on CFTR-Generated Chloride Channels: D. P. RICH, R. J. GREGORY, M. P. ANDERSON, F. MANAVALAN, A. E. SMITH, M. J. WELSH

Technical Comments


Book Reviews

212 Numerical Control, reviewed by P. E. CERUZZI The Market and Beyond, M. A. CUSUMANO Owls, Caves and Fossils, R. W. GRAHAM The Biology of Franks and Actinorhizal Plants, A. D. L. AKERMANS Books Received

Products & Materials

218 DNA Molecular Weight Marker Sensitive Transducers for Physiology Studies Geometric Graphics and Volume Rendering Cryopreservation System Daygl MICROCENTRIFUGE TUBE Custom DNA Probes Conservation Biology Software Plotting Software Updated Literature