315 This Week in Science

Editorial
317 Evolving State-University-Industry Relations

Letters
319 Archeology Congress: V. Pretorius; T. C. Patterson and P. L. Kohl Complexity: B. R. Fink

News & Comment
327 Proposed New Psychiatric Diagnoses Raise Charges of Gender Bias
329 Fiscal Neglect Breeds Problems for Seed Banks
331 Limited ASAT Proposal Gains Backers
332 Briefing: Fossil Research Faces Sharp Cutsbacks in '87 • Acid Rain Plan Draws Mixed Review • Nuclear Testing Up Sharply Under Reagan • Rancho Seco Reactor Suffers Another Mishap

Research News
335 Shakespeare's New Poem: An Ode to Statistics
336 Is Cygnus X-3 a Quark Star?
339 The Sun Is Fading
340 Briefing: Cell Lineages Traced in Zebrafish Embryos • Bell Labs Transistor Sets a Speed Record

Articles
341 The Origin of the Moon: A. P. Boss
346 Electrons in Silicon Microstructures: R. E. Howard, L. D. Jackel, P. M. Mankeiwich, W. J. Skocpol
350 Optical Activity and Ferroelectricity in Liquid Crystals: J. W. Goodby
356 Selenium in Organic Synthesis: D. Liotta and R. Monahan III
362 The 1985 Nobel Prize in Chemistry: W. A. Hendrickson

Research Article
365 Tissue-Specific Cell Lineages Originate in the Gastrula of the Zebrafish: C. B. Kimmel and R. M. Warga

Reports
373 Ingestion of Petroleum by Seabirds Can Serve as a Monitor of Water Quality: P. D. Boersma
376 Retinal Dystrophy: Development Retarded by Galactose Feeding in Spontaneously Hypertensive Rats: R. N. Frank, R. J. Keirn, G. V. Keirn, M. A. Mancini, J. K. Khoury
COVER East Atmatuli Island, one of the Barren Islands in the northern part of the Gulf of Alaska, is home to several hundred thousand fork-tailed storm-petrels that return to the island only at night. Regional water quality can be monitored by collecting storm-petrel regurgitate and analyzing it for the presence or absence of fossil fuel hydrocarbons. See page 373. [P. Dee Boersma, Institute for Environmental Studies, University of Washington, Seattle 98195]


382 Binding of HTLV-III/LAV to T4+ T Cells by a Complex of the 110K Viral Protein and the T4 Molecule: J. S. MCDougal, M. S. KENNEDY, J. M. SLIGH, S. P. CORT, A. MAWLE, J. K. A. NICHOLSON


390 Protein-Tyrosine Kinase Activity in Saccharomyces cerevisiae: G. SCHIEVEN, J. THORNER, G. S. MARTIN

393 The Context Effect Does Not Require a Fourth Base Pair: D. AYER and M. YARUS


397 A Blood Vessel Model Constructed from Collagen and Cultured Vascular Cells: C. B. WEINBERG and E. BELL

400 Sevenless: A Cell-Specific Homeotic Mutation of the Drosophila Eye: A. TOMLINSON and D. F. READY

402 Dynamics of Lymphocyte-Endothelial Interactions in Vivo: M. BJERKES, H. CHENG, C. A. OTTAWAY

405 Reductions in Arterial Diameter Produced by Chronic Decreases in Blood Flow Are Endothelium-Dependent: B. L. LANGILLE and F. O’DONNELL


Meetings

411 R&D and the Budget Crisis ■ Advance Registration Form

Book Reviews

413 Crime and Human Nature, reviewed by J. GUSFIELD ■ Cultural Imperialism and Exact Sciences, J. A. JOHNSON ■ Paleontology, A. H. KNOLL ■ The Biology of Cell Reproduction, G. STEIN and J. STEIN ■ Books Received

Products & Materials

417 Aspirator ■ Gas Chromatograph/Mass Spectrometer ■ Laboratory Freezer ■ Image Analysis for Autoradiography ■ Modular Chromatography Devices ■ Cell Culture Reactor ■ Literature

418 Theodore H. Geballe
Robert B. Goldberg
Stephen P. Goff
Roger I. M. Glass
Patricia S. Goldman-Rakic
Richard M. Held
Gloria Huppler
Eric F. Johnson
Konrad B. Krauskopf
Joseph B. Martin
John C. McGiff
Alton Meister
Mortimer Mishkin
John S. Pearse
Yesheayu Pocker
Frederic M. Richards
James E. Rothman

Ronald H. Schwartz
Otto T. Solbrig
Robert T. T. Tjan
Virginia Trimble
Geerat J. Vermeij
Martin G. Weigt
George M. Whitesides
William B. Wood
Harriet Zuckerman

24 JANUARY 1986

TABLE OF CONTENTS 313
Editor's Summary