



**COVER** The career path of a scientist in the 1990s may seem a high-wire act with a dotted-line future. Today's successful scientist walks a tenuous line between seeking security in an uncertain funding environment and taking risks in an age of spectacular advances. He or she is asked to balance the competing tugs of business and academe, of applied and basic research, of authority based on narrow expertise and utility based on multidisciplinary experience. Our special pull-out report on careers, beginning on page 1107, is meant to help scientists navigate their individual high wires. [Image by Guy Billout]

## Reports

- 1151 Acidic Lakes and Streams in the United States: The Role of Acidic Deposition: L. A. BAKER, A. T. HERLIHY, P. R. KAUFMANN, J. M. EILERS
- 1154 Alkali-Fulleride Superconductors: Synthesis, Composition, and Diamagnetic Shielding: K. HOLCZER, O. KLEIN, S.-M. HUANG, R. B. KANER, K.-J. FU, R. L. WHETTEN, F. DIEDERICH
- 1157 New Mechanism of Cavitation Damage: Y. L. CHEN AND J. ISRAELACHVILI
- 1160 The Chemical Nature of Buckminsterfullerene (C<sub>60</sub>) and the Characterization of a Platinum Derivative: P. J. FAGAN, J. C. CALABRESE, B. MALONE
- 1162 Predicting Coiled Coils from Protein Sequences: A. LUPAS, M. VAN DYKE, J. STOCK
- 1164 Self-Assembled Organic Monolayers: Model Systems for Studying Adsorption of Proteins at Surfaces: K. L. PRIME AND G. M. WHITESIDES
- 1167 Arginine-Mediated RNA Recognition: The Arginine Fork: B. J. CALNAN, B. TIDOR, S. BIANCALANA, D. HUDSON, A. D. FRANKEL
- 1171 Requirement of GTP Hydrolysis for Dissociation of the Signal Recognition Particle from Its Receptor: T. CONNOLLY, P. J. RAPIEJKO, R. GILMORE
- 1173 Effect of Wnt-1 and Related Proteins on Gap Junctional Communication in *Xenopus* Embryos: D. J. OLSON, J. L. CHRISTIAN, R. T. MOON
- 1177 Interhemispheric Synchronization of Oscillatory Neuronal Responses in Cat Visual Cortex: A. K. ENGEL, P. KÖNIG, A. K. KREITER, W. SINGER
- 1179 Fragile X Genotype Characterized by an Unstable Region of DNA: S. YU, M. PRITCHARD, E. KREMER, M. LYNCH, J. NANCARROW, E. BAKER, K. HOLMAN, J. C. MULLEY, S. T. WARREN, D. SCHLESSINGER *et al.*

## Inside AAAS

- 1184 The SWAT Team Wore Suits: AAAS Deploys Quick-Response Congressional Seminars ■ In Brief ■ Uncalculated Art ■ Women, Minorities, and Science

## Book Reviews

- 1186 Causes of Evolution, *reviewed by* A. LARSON ■ The Mississippian Emergence, G. R. MILNER ■ Solnhofen, L. D. MARTIN ■ Concepts and Applications of Molecular Similarity, J. B. HENDRICKSON ■ Books Received

## Products & Materials

- 1190 Sequence Processing Software ■ Thermostable DNA Polymerase ■ Microtome Line ■ Conversion Software ■ Molecular Graphics Software ■ Gel Electrophoresis Documentation System ■ Columns for Capillary Electrophoresis ■ Literature

### Board of Directors

Donald N. Langenberg  
*Retiring President,  
Chairman*

Leon M. Lederman  
*President*

F. Sherwood Rowland  
*President-elect*

Mary Ellen Avery  
Francisco J. Ayala  
Eugene H. Cota-Robles  
Robert A. Frosch  
Joseph G. Gavin, Jr.  
Florence P. Haseltine  
Jean'ne M. Shreeve  
Warren M. Washington

William T. Golden  
*Treasurer*

Richard S. Nicholson  
*Executive Officer*

### Editorial Board

Charles J. Amtzen  
Elizabeth E. Bailey  
David Baltimore  
William F. Brinkman  
E. Margaret Burbidge  
Pierre-Gilles de Gennes  
Joseph L. Goldstein  
Mary L. Good  
Harry B. Gray  
John J. Hopfield  
F. Clark Howell  
Paul A. Marks  
Yasutomi Nishizuka  
Helen M. Ranney  
Robert M. Solow  
Edward C. Stone  
James D. Watson

### Board of Reviewing Editors

John Abelson  
Frederick W. Alt  
Don L. Anderson  
Stephen J. Benkovic  
Floyd E. Bloom  
Henry R. Bourne  
James J. Bull  
Kathryn Calame  
Charles R. Cantor  
Ralph J. Cicerone  
John M. Coffin  
Robert Dorfman  
Bruce F. Eldridge  
Paul T. Englund  
Fredric S. Fay

Douglas T. Fearon  
Harry A. Fozzard  
Theodore H. Geballe  
Roger I. M. Glass  
Stephen P. Goff  
Corey S. Goodman  
Stephen J. Gould  
Eric F. Johnson  
Stephen M. Kosslyn  
Konrad B. Krauskopf  
Charles S. Levings III  
Richard Losick  
Anthony R. Means  
Mortimer Mishkin  
Roger A. Nicoll  
William H. Orme-Johnson III  
Yeshayau Pocker

Dennis A. Powers  
Erkki Ruoslahti  
Thomas W. Schoener  
Ronald H. Schwartz  
Terrence J. Sejnowski  
Thomas A. Steitz  
Robert T. N. Tjian  
Emil R. Unanue  
Geerat J. Vermeij  
Bert Vogelstein  
Harold Weintraub  
Zena Werb  
George M. Whitesides  
Owen N. Witte  
William B. Wood  
Keith Yamamoto