

of research reports that could equally well have found places in paleontological journals. For those interested in research on Late Cretaceous and early Tertiary terrestrial biotas it is a useful compilation. Also, because it illustrates the current status and potential for future paleontological research, it should be read by those concerned with management of the lands within the San Juan Basin.

WILLIAM A. CLEMENS

Department of Paleontology,  
University of California,  
Berkeley 94720

## Books Received

**Atlantis Reconsidered.** A New Look at the Ancient Deluge Legends and an Analysis of Mysterious Modern Phenomena. Michael Baran. Exposition Press, Smithtown, N.Y., 1981. x, 86 pp. \$6.

**Australian Vegetation.** R. H. Groves, Ed. Cambridge University Press, New York, 1981. xiv, 450 pp., illus. \$64.50.

**Autos, Transit and Cities.** John R. Meyer and José A. Gómez-Ibáñez. Harvard University Press, Cambridge, Mass., 1981. x, 360 pp. \$20. A Twentieth Century Fund Report.

**Basic Mathematics for Biochemists.** Athel Cornish-Bowden. Chapman and Hall, London, 1981 (U.S. distributor, Methuen, New York). x, 138 pp., illus. Cloth, \$23; paper, \$12.95.

**Comets and the Origin of Life.** Proceedings of a colloquium, College Park, Md., Oct. 1980. Cyril Ponnamperna, Ed. Reidel, Boston, 1981 (distributor, Kluwer Boston, Hingham, Mass.). viii, 282 pp., illus. \$39.50.

**Commercial Fish Farming.** With Special Reference to Fish Culture in Israel. Balfour Hephner and Yoel Pruginin. Wiley-Interscience, New York, 1981. x, 262 pp., illus. \$32.50.

**Comparative Diagnosis of Viral Diseases.** Vol. 4, Vertebrate Animal and Related Viruses, Part B—RNA Viruses. Edouard Kurstak and Christine Kurstak, Eds. Academic Press, New York, 1981. xxii, 694 pp., illus. \$79.

**The Computer Establishment.** Katharine Davis Fishman. Harper and Row, New York, 1981. xii, 468 pp. + plates. \$20.95.

**Computer Performance Evaluation.** Tools and Techniques for Effective Analysis. Michael F. Morris and Paul F. Roth. Van Nostrand Reinhold, New York, 1981. xviii, 260 pp. \$24.95.

**Computers in Materials Technology.** Proceedings of a conference, Linköping, Sweden, June 1980. Pergamon, New York, 1981. x, 224 pp., illus. \$35.

**Concepts of Health and Disease.** Interdisciplinary Perspectives. Arthur L. Caplan, H. Tristram Engelhardt, Jr., and James J. McCartney, Eds. Addison-Wesley Advanced Book Program, Reading, Mass., 1981. xxxvi, 756 pp. Paper, \$29.50.

**Concise Dictionary of Scientific Biography.** Scribner, New York, 1981. x, 733 pp. \$100.

**Conductive Polymers.** Proceedings of a symposium, Las Vegas, Nev., Aug. 1980. Raymond B. Seymour, Ed. Plenum, New York, 1981. x, 238 pp., illus. \$35. Polymer Science and Technology, vol. 15.

**Contemporary Hematology/Oncology.** Vol. 2. Robert Silber, Albert S. Gordon, Joseph LoBue, and Franco M. Muggia, Eds. Plenum, New York, 1981. xx, 548 pp. \$49.50.

**Contributions to Arachnid Systematics in Honor of Willis J. Gertsch.** On the Occasion of his Seventy-Fifth Birthday. American Museum of Natural History, New York, 1981. 270 pp., illus. Paper, \$19.15. Bulletin of the American Museum of Natural History, vol. 170, article 1.

**Control Problems and Devices in Manufacturing Technology 1980.** Proceedings of a symposium, Budapest, Oct. 1980. T. M. R. Ellis, Ed. Published for the International Federation of Automatic Control by Pergamon, New York, 1981. x, 376 pp., illus. \$70. IFAC Proceedings Series.

**Copper Deficiency and Toxicity.** Acquired and Inherited, in Plants, Animals, and Man. Charles A. Owen, Jr. Noyes, Park Ridge, N.J., 1981. xvi, 190 pp. \$28. Copper in Biology and Medicine Series.

**Corporations and the Environment.** How Should Decisions Be Made? Papers from a symposium, Stanford, Nov. 1980. David L. Brunner, Will Miller, and Nan Stockholm, Eds. Committee on Corporate

Responsibility, Stanford University Graduate School of Business, Stanford, Calif., 1981 (distributor, Kaufmann, Los Altos, Calif.). viii, 176 pp. Cloth, \$12.95; paper, \$7.95.

**Current Problems and New Trends in Cystic Fibrosis.** Papers from a meeting, Bern, Sept. 1981. M. Schüli and R. Kraemer, Eds. Karger, Basel, 1981. xii, 216 pp., illus. Paper, \$89.25. Monographs in Paediatrics, vol. 14.

**Current Research in Earthquake Prediction I.** Tsuneji Rikitake, Ed. Center for Academic Publications Japan, Tokyo, and Reidel, Boston, 1981 (distributor, Kluwer Boston, Hingham, Mass.). xiv, 344 pp., illus. \$37. Developments in Earth and Planetary Sciences, 02.

**Dictionary of Waste and Water Treatment.** John S. Scott and Paul G. Smith. Butterworths, Boston, 1981. vi, 360 pp., illus. \$49.95.

**Fifty Years of Electron Diffraction.** P. Goodman, Ed. Published for the International Union of Crystallography by Reidel, Boston, 1981 (distributor, Kluwer Boston, Hingham, Mass.). xiv, 440 pp., illus. Cloth, \$75; paper, \$39.50.

**Forests in the Here and Now.** A Collection of Writings of Hugh Miller Raup, Bullard Professor of Forestry, Emeritus, Harvard University. Benjamin B. Stout, Ed. Montana Forest and Conservation Experiment Station, School of Forestry, University of Montana, Missoula, 1981. xiv, 132 pp. Paper, \$5.

**The Forever Fuel.** The Story of Hydrogen. Peter Hoffmann. Westview, Boulder, Colo., 1981. xvi, 272 pp., illus. \$20.

**The Foundations of Biological Theory.** E. H. Mercey. Wiley-Interscience, New York, 1981. x, 232 pp., illus. \$35.

**Fourteenth Oil Shale Symposium Proceedings.** Golden, Colo., Apr. 1981. James H. Gary, Ed. Colorado School of Mines Press, Golden, 1981. vi, 434 pp., illus. Paper, \$18.

**The Gasohol Handbook.** V. Daniel Hunt. Industrial Press, New York, 1981. viii, 580 pp., illus. \$29.50.

**Gender.** The Myth of Equality. James C. Neely. Simon and Schuster, New York, 1981. 322 pp. \$13.95.

**Geologic Reference Sources.** A Subject and Regional Bibliography of Publications and Maps in the Geological Sciences. Dederick C. Ward, Marjorie W. Wheeler, and Robert A. Bier, Jr. Scarecrow, Metuchen, N.J., ed. 2, 1981. xxvi, 560 pp. \$30.

**Geometrical Methods of Mathematical Physics.** Bernard F. Schutz. Cambridge University Press, New York, 1980. xii, 250 pp., illus. Cloth, \$39.95; paper, \$16.95.

**Geomorphological Techniques.** Andrew Goudie, Ed. Allen and Unwin, Boston, 1981. xvi, 396 pp., illus. Cloth, \$60; paper, \$29.95.

**George Washington Carver.** Scientist and Symbol. Linda O. McMurry. Oxford University Press, New York, 1981. xii, 368 pp., illus. \$25.

**Global Reconstruction and the Geomagnetic Field during the Palaeozoic.** Proceedings of a symposium, Canberra, Australia, Dec. 1979. M. W. McElhinny, A. N. Khramov, M. Ozima, and D. A. Valencia, Eds. Center for Academic Publications Japan, Tokyo, and Reidel, Boston (distributor, Kluwer Boston, Hingham, Mass.). xii, 150 pp., illus. \$29.50. Advances in Earth and Planetary Sciences 10.

**Handbook of Toxic Fungal Metabolites.** Richard J. Cole and Richard H. Cox. Academic Press, New York, 1981. xviii, 938 pp., illus. \$79.

**Handbook of Zoo Medicine.** Diseases and Treatment of Wild Animals in Zoos, Game Parks, Circuses and Private Collections. Heinz-Georg Klös and Ernst M. Lang. Translated from the German edition (1976) by G. Speckmann. Van Nostrand Reinhold, New York, 1981. xx, 454 pp., illus. \$49.50.

**Health Survey Research Methods.** Papers from a conference, Reston, Va., May 1979. National Center for Health Services Research, Hyattsville, Md., 1981. x, 306 pp. Paper. NCHSR Research Proceedings Series. DHHS Publication No. (PHS) 81-3268.

**Heat Exchangers.** Thermal-Hydraulic Fundamentals and Design. Papers from a NATO Advanced Study Institute, Istanbul, Turkey, Aug. 1980. S. Kakac, A. E. Bergles, and F. Mayinger, Eds. Hemisphere, Washington, D.C., and McGraw-Hill, New York, 1981. xii, 1132 pp., illus. \$95.

**Heating Services Design.** Ronald K. McLaughlin, R. Craig McLean, and W. John Bonthron. Butterworths, Boston, 1981. viii, 446 pp., illus. \$54.

**Hematology.** William S. Beck, Ed. MIT Press, Cambridge, Mass., ed. 3, 1981. xvi, 462 pp., illus. Paper, \$15.

**Heterogeneity of Mononuclear Phagocytes.** Proceedings of a workshop, Baden/Vienna, July 1980. Othmar Förster and Maurice Landy, Eds. Academic Press, New York, 1981. xviii, 538 pp., illus. \$39.50.

**High Altitude Physiology.** John B. West, Ed. Hutchinson Ross, Stroudsburg, Pa., 1981 (distributor, Academic Press, New York). xviii, 462 pp., illus. \$55. Benchmark Papers in Human Physiology, vol. 15.

**Hiroshima and Nagasaki.** The Physical, Medical,

and Social Effects of the Atomic Bombings. The Committee for the Compilation of Materials on Damage Caused by the Atomic Bombs in Hiroshima and Nagasaki. Translated from the Japanese edition (Tokyo, 1979) by Eisei Ishikawa and David L. Swain. Basic Books, New York, 1981. xlvii, 706 pp., illus. \$37.50.

**Hormonal Regulation of Epithelial Transport of Ions and Water.** Papers from a conference, Nov. 1980. Walter N. Scott and David B. P. Goodman, Eds. New York Academy of Sciences, New York, 1981. xii, 660 pp., illus. Paper, \$140. *Annals of the New York Academy of Sciences*, vol. 372.

**Information Retrieval.** C. J. van Rijsbergen. Butterworths, Boston, ed. 2, 1981. x, 208 pp., illus. Paper, \$49.95. Reprint of the 1979 edition.

**Infusionstherapie mit Dextranen.** Ein aktueller Überblick. Papers from a symposium, Krems, May 1980. K. Steinbereithner and W. F. List, Eds. Karger, Basel, 1981. vi, 112 pp., illus. Paper, \$15. Beiträge zu Infusionstherapie, 8.

**Inhibition of Tumor Induction and Development.** Morris S. Zedeck and Martin Lipkin, Eds. Plenum, New York, 1981. xiv, 234 pp., illus. \$27.50.

**Insects and Fungi Associated with Carduus Thistles (Compositae).** S. W. T. Batra, J. R. Coulson, P. H. Dunn, and P. E. Boldt. United States Department of Agriculture, Washington, D. C., 1981. 100 pp. Paper. Technical Bulletin No. 1616.

**Introduction à la Psychologie de l'Enfant.** Jean-Adolphe Rondal and Michel Hurtig, Eds. Mardaga, Brussels, 1981. Three volumes. 772 pp., illus. Paper, 2925 BF.

**An Introduction to Behavioral Ecology.** J. R. Krebs and N. B. Davies. Sinauer, Sunderland, Mass., 1981. x, 292 pp., illus. Cloth, \$39.60; paper, \$16.50.

**Introduction to Building Management.** R. E. Calvert. Butterworths, Boston, ed. 4, 1981. xii, 444 pp., illus. Paper, \$37.95.

**Introduction to Diagnostic Electron Microscopy.** Bruce Mackay. Appleton-Century-Crofts, New York, 1981. x, 262 pp., illus. \$32.50.

**Introduction to Modern Electronics.** Julien C. Sprott. Wiley, New York, 1981. xiv, 350 pp., illus. \$24.95.

**An Introduction to the Principles of Vibrations of Linear Systems.** Pierre Thureau and Daniel Leclerc. Translated from the French edition (Paris, 1971) and adapted by J. Grosjean. Halsted (Wiley), New York, 1981. x, 132 pp., illus. \$17.50.

**Invertebrate Biology.** A Functional Approach. P. Calow. Croom Helm, London, and Halsted (Wiley), New York, 1981. 184 pp., illus. Paper, \$21.95.

**Invertebrate Blood Cells.** N. A. Ratcliffe and A. F. Rowley, Eds. Academic Press, New York, 1981. 2 vols. xxiv, 642 pp., illus., + index. \$79.50.

**Investigation of Brain Function.** Proceedings of a school, Erice, Italy, May 1980. A. W. Wilkinson, Ed. Plenum, New York, 1981. viii, 262 pp., illus. \$35. Ettore Majorana International Science Series, vol. 7.

**Investing in People.** The Economics of Population Quality. Theodore W. Schultz. University of California Press, Berkeley, 1981. xii, 174 pp. \$12.95. The Royer Lectures 1980.

**Ion Implantation in Microelectronics.** A Comprehensive Bibliography. A. H. Agajanian. IFI/Plenum, New York, 1981. x, 256 pp. \$85. Computer Science Information Guides, vol. 1.

**Ion Transport by Epithelia.** Papers from a symposium. Stanley G. Schultz, Ed. Raven, New York, 1981. xviii, 270 pp., illus. \$32. Society of General Physiologists Series, vol. 36.

**Ion Transport in Heart.** L. J. Mullins. Raven, New York, 1981. viii, 136 pp. \$16.50.

**Ion-Selective Microelectrodes and Their Use in Excitable Tissues.** Proceedings of a symposium, Prague, July 1980. Eva Syková, Pavel Hník, and Ladislav Vyklický, Eds. Plenum, New York, 1981. xii, 370 pp., illus. \$39.50.

**Laser and Electron-Beam Solid Interactions and Materials Processing.** Proceedings of a meeting, Boston, Nov. 1980. J. F. Gibbons, L. D. Hess, and T. W. Sigmon, Eds. North-Holland, New York, 1981. xvi, 630 pp., illus. \$70. Materials Research Society Symposia Proceedings, vol. 1.

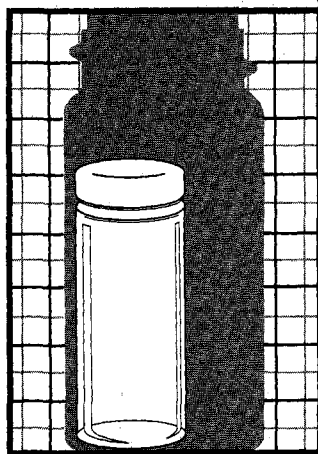
**Life for Sale.** Sharon McAuliffe and Kathleen McAuliffe. Coward, McCann and Geoghegan, New York, 1981. 244 pp. \$12.95.

**The Mathematical Theory of the Dynamics of Biological Populations II.** Papers from a conference, Oxford, July 1980. R. W. Hiorns and D. Cooke, Eds. Academic Press, New York, 1981. xii, 328 pp., illus. \$35. The Institute of Mathematics and Its Applications Conference Series.

**Mathematics and Physics.** Yu. I. Manin. Translated from the Russian edition (Moscow, 1979) by Ann and Neal Kobilitz. Birkhäuser, Boston, 1981. xii, 100 pp. \$10. Progress in Physics, vol. 3.

**Membrane Transport and Neuroreceptors.** Proceedings of a symposium, Keystone, Colo., Feb. 1980. Dale Oxender, Arthur Blume, Ivan Diamond, (Continued on page 1003)

# J.T. Baker Reduced Volume Scintillation Fluids for Aqueous LSC Samples



## FACTS:

- Requires only 3-5 ml of fluid per 1 ml of aqueous sample
- Yields cost reduction of 33-50%
- Gives significantly improved counting efficiency
- Cuts waste volume in half
- Provides increased safety—higher flash points and safer packaging

Baker provides a choice of three reduced volume fluids:

- AQUALYTE™
- AQUALYTE PLUS™
- MAXIFLUOR™

combined with 6 ml and 3 ml MILLIQUANT™ vials. This innovative system drastically reduces per sample costs and overall waste disposal *without sacrificing performance.* (See Table I)

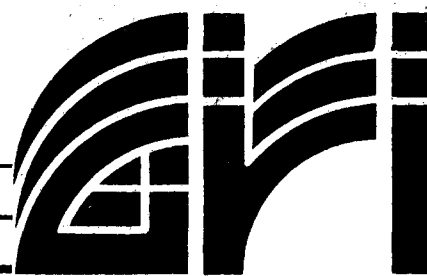
Table I: <sup>3</sup>H-Counting Efficiency for 0.15M NaCl

Sample Load	0.5 ml	1.0 ml	1.6, 1.4, 1.4 ml
Reduced Volume Fluid (4 ml)	53.3	50.0	43.9
Cocktail A (10 ml)	42.3	38.3	38.2
Cocktail B (10 ml)	42.3	41.1	38.5

Higher counting efficiency and increased sample loading capacity result from the use of Baker's proprietary blend of ionic surfactants. To discover how J. T. Baker's reduced volume approach can work for you, write or call:



J. T. Baker Chemical Company  
Product Manager  
Biological Science Products  
222 Red School Lane  
Phillipsburg, NJ 08865 (201) 859-2151



## Project Management

### NATURAL GAS RESEARCH

Basic Research fulfills an essential function within GRI: to develop the conceptual and scientific groundwork for long-term advances in natural gas supply, utilization, and distribution technologies. Currently, the Basic Research program is adding two positions to its staff to manage University grants and contracts in research project areas, they are:

- Project Manager, Combustion
- Project Manager, Thermophysical Properties

The ideal individual will possess an advanced degree in Chemical Engineering, Chemistry, or Physics and 3-5 years' experience in thermodynamics, thermophysical fluid properties, or engineering related to combustion or flame science, or turbulent/reactive gas dynamics.

GRI manages R&D programs in natural gas technology. Funded by the ratepayer, GRI is dedicated to improving the efficiency of natural gas utilization for the benefit of the consumer. Energy management is the key to a promising future: will you be one to help insure it?

Qualified individuals should forward their resume, including salary requirements to: **D.J. Levit, Dept. S-409.**

**GAS RESEARCH INSTITUTE**  
8600 West Bryn Mawr Avenue  
Chicago, IL 60631

equal opportunity employer m/f/h

## Gas Research Institute

## BOOKS RECEIVED

(Continued from page 964)

and C. Fred Fox, Eds. Liss, New York, 1981. xx, 450 pp., illus. \$68. Progress in Clinical and Biological Research, vol. 63.

**Mère et Enfant.** Les Premières Relations. Daniel Stern, Mardaga, Brussels, 1981. 200 pp. Paper, 460 BF. Psychologie et Sciences Humaines, 96.

**Metabolic Disorders, Methods of Examination.** W. Straub, Ed. Karger, Basel, 1981. vi, 218 pp., illus. \$99.50. Developments in Ophthalmology, vol. 4.

**Metabolism and Molecular Activities of Cytokinins.** Proceedings of a colloquium, Gif-sur-Yvette, France, Sept. 1980. J. Guern and C. Péaud-Lenoël, Eds. Springer-Verlag, New York, 1981. xii, 352 pp., illus. \$59. Proceedings in Life Sciences.

**Metal Ions in Biological Systems.** Vol. 12, Properties of Copper. Helmut Sigel, Ed. Dekker, New York, 1981. xxii, 354 pp., illus. \$57.50.

**Methods of Animal Experimentation.** Vol. 6, William I. Gay, Ed. Academic Press, New York, 1981. xiv, 366 pp., illus. \$47.50.

**Methods of Experimental Physics.** L. Marton and C. Marton, Eds. Vol. 18, Fluid Dynamics. Part B. R. J. Emrich, Ed. Academic Press, New York, 1981. xvi + pp. 405-878, illus. \$52.

**The New Evolutionary Timetable.** Fossils, Genes, and the Origin of Species. Steven M. Stanley. Basic Books, New York, 1981. xvi, 222 pp., illus. \$16.75.

**The New Madrid Earthquakes.** James Lal Penick, Jr. University of Missouri Press, Columbia, ed. 2, 1981. xvi, 176 pp., illus. Paper, \$7.95.

**Newton on the Continent.** Henry Guericke. Cornell University Press, Ithaca, N.Y., 1981. 174 pp., illus. \$12.50.

**Nuclear and Electron Resonance Spectroscopies Applied to Materials Science.** Proceedings of a meeting, Boston, Nov. 1980. E. N. Kaufmann and G. K. Shenoy, Eds. North-Holland, New York, 1981. xii, 558 pp., illus. \$65. Materials Research Society Symposium Proceedings, vol. 3.

**Oil Shale.** The Environmental Challenges. Proceedings of a symposium, Vail, Colo., Aug. 1980. Kathy Kellogg Petersen, Ed. Colorado School of Mines Press, Golden, 1981. viii, 380 pp., illus. \$19.

**On Scientific Thinking.** Ryan D. Tweney, Michael E. Doherty, and Clifford R. Mynatt, Eds. Columbia University Press, New York, 1981. xii, 460 pp. Cloth, \$32.50; paper, \$15.

**Ontogeny of the Immune System.** Byron H. Waksman, Ed. Karger, Basel, 1981. xii, 268 pp. \$87. Progress in Allergy, vol. 29.

**Operating System Elements.** A User Perspective. Peter Calingaert. Prentice-Hall, Englewood Cliffs, N.J., 1982. xvi, 240 pp., illus. \$23.95. Prentice-Hall Software Series.

**Optimality in Parametric Systems.** Thomas L. Vincent and Walter J. Grantham. Wiley-Interscience, New York, 1981. xviii, 244 pp., illus. \$29.

**Organic Chemistry.** An Introduction. Jack E. Fernandez. Prentice-Hall, Englewood Cliffs, N.J., 1981. xxii, 538 pp., illus. \$19.95.

**Organometallic Syntheses.** Vol. 2, Nontransition-Metal Compounds. John J. Eisch. Academic Press, New York, 1981. xiv, 194 pp., illus. \$29.50.

**Origins of Form.** Christopher Williams. Architectural Book Publishing Company, New York, 1981. 144 pp., illus. Paper, \$12.95.

**Pattern Dissemination in the Prehistoric Southwest and Mesoamerica.** A Comparison of Hohokam Decorative Patterns with Patterns from the Upper Gila Area and from the Valley of Oaxaca. Bert Zaslow. Arizona State University Department of Anthropology, Tempe, 1981. x, 58 pp., illus. Paper, \$4. Arizona State University Anthropological Research Papers No. 25.

**Pattern Recognition with Fuzzy Objective Function Algorithms.** James C. Bezdek. Plenum, New York, 1981. xvi, 256 pp., illus. \$35. Advanced Applications in Pattern Recognition.

**Patty's Industrial Hygiene and Toxicology.** Vol. 2B, Toxicology. George D. Clayton and Florence E. Clayton, Eds. Wiley-Interscience, New York, ed. 3, 1981. xx + pp. 2879-3816. \$70.

**Progress in Cybernetics and Systems Research.** Vol. 6, Cybernetics in Biology and Medicine. Systems Analysis, Systems Engineering Methodology, Mathematical Systems Theory. Papers from a meeting, Linz, Austria, 1978. Franz R. Pichler and Robert Trapp, Eds. Hemisphere, Washington, D.C., 1981. xvi, 398 pp., illus. \$80.

**Progress in Medical Terminology.** A. Manuila, Ed. Karger, Basel, 1981. xii, 116 pp. Paper, \$47.50.

**Protest and Survive.** E. P. Thompson and Dan Smith, Eds. Drawings by Marshall Arisman. Monthly Review Press, New York, 1981. xxviii, 216 pp. Paper, \$4.95.

**Quantum Mechanics.** Hendrik F. Hameka. Wiley-Interscience, New York, 1981. xii, 388 pp., illus. \$32.50.

**Quantum Mechanics in Hilbert Space.** Eduard Pru-

govečki. Academic Press, New York, ed. 2, 1981. xxii, 686 pp. \$39.50. Pure and Applied Mathematics, 92.

**Radiation and Human Health.** John W. Gofman. Sierra Club Books, San Francisco, 1981. xiv, 908 pp., illus. \$29.95.

**Radiation Heat Transfer Notes.** D. K. Edwards. Hemisphere, Washington, D.C., 1981. xiv, 370 pp., illus. Paper, \$19.95.

**Radical Knowledge.** A Philosophical Inquiry into the Nature and Limits of Science. Gonzalo Munévar. Hackett, Indianapolis, Ind., 1981. x, 126 pp., illus. Cloth, \$15; paper, \$6.25.

**Radioactive Waste from Nuclear Power Plants.** Thomas B. Johansson and Peter Steen. University of California Press, Berkeley, 1981. x, 198 pp. \$15.95.

**Rand McNally Cosmopolitan World Atlas.** Census Edition. Rand McNally, Chicago, 1981. lvi, 142 pp. + plates + index. \$45.

**Rand McNally Premier World Atlas.** Census Edition. Rand McNally, Chicago, 1981. Variously pagged. \$35.

**Rand McNally United States Atlas.** Rand McNally, Chicago, 1981. 96 pp. Paper, \$6.95.

**Readings in Caribbean History and Economics.** An Introduction to the Region. Roberta Marx Delson. Gordon and Breach, New York, 1981. xxii, 336 pp. \$59.50. Caribbean Studies, vol. 1.

**Readings in Mammalian Cell Culture.** Robert Pollock, Ed. Cold Spring Harbor Laboratory, Cold Spring Harbor, N.Y., ed. 2, 1981. xvi, 718 pp., illus. Cloth, \$26; paper, \$31.20.

**Recognition of Health Hazards in Industry.** A Review of Materials and Processes. William A. Burgess. Wiley-Interscience, New York, 1981. xvi, 276 pp., illus. \$27.50.

**The Social World.** Ian Robertson, Ed. Worth, New York, 1981. x, 396 pp. Paper, \$9.95.

**Soil and Water Conservation Engineering.** Glenn O. Schwab, Richard K. Frevert, Talcott W. Edminster, and Kenneth K. Barnes. Wiley, New York, ed. 3, 1981. xvi, 526 pp., illus. \$32.95.

**Solar Cooling and Dehumidifying.** Proceedings of a conference, Caracas, Aug. 1980. A. R. Martinez, Ed. Pergamon, New York, 1981. xiv, 268 pp., illus. \$40.

**Solar Energy Applications in Houses.** Performance and Economics in Europe. F. Jäger. Published for the Commission of the European Communities by Pergamon, New York, 1981. xii, 176 pp., illus. \$35.

**Somatic Selection and Adaptive Evolution.** On Inheritance of Acquired Characters. E. J. Steele. University of Chicago Press, Chicago, ed. 2, 1981. x, 134 pp., illus. Cloth, \$18; paper, \$5.95.

**Some Fundamental Approaches in Skin Research.** J. W. H. Mali, Ed. Karger, Basel, 1981. viii, 150 pp., illus. Paper, \$58.75. Current Problems in Dermatology, vol. 9.

**Spaceliner.** The New York Times Report on the Columbia's Voyage into Tomorrow. William Stockton and John Noble Wilford. Times Books, New York, 1981. xii, 184 pp. + plates. \$12.50.

**Stability and Change.** Innovation in an Educational Context. Sheila Rosenblum and Karen Seashore Louis with the assistance of Nancy Brigham and Robert E. Herriott. Plenum, New York, 1981. xviii, 352 pp. \$29.50. Environment, Development, and Public Policy.

**Stages to Saturn.** A Technological History of the Apollo/Saturn Launch Vehicles. Roger E. Bilstein. National Aeronautics and Space Administration, Washington, D.C., 1980 (available from the Superintendent of Documents, Washington, D.C.). xx, 514 pp., illus. \$9.50. The NASA History Series. NASA SP-4206.

**The Structural Basis of Muscular Contraction.** John Squire. Plenum, New York, 1981. xviii, 698 pp., illus. \$65.

**Structural Design with Plastics.** B. S. Benjamin. Van Nostrand Reinhold, New York, ed. 2, 1981. xii, 388 pp., illus. \$32.

**Subsurface Space.** Environmental Protection, Low Cost Storage, Energy Savings. Proceedings of a meeting, Stockholm, June 1980. Magnus Bergman, Ed. Pergamon, New York, 1981. Three volumes. xciv, 1410 pp., illus. \$250.

**A Summons to Life.** Mediating Structures and the Prevention of Youth Crime. Robert L. Woodson. Ballinger (Harper and Row), Cambridge, Mass., 1981. xx, 146 pp. Paper, \$17.50. An American Enterprise Institute Book.

**The Sun Shines Bright.** Isaac Asimov. Doubleday, Garden City, N.Y., 1981. xiv, 250 pp. \$13.95.

**Surface Phenomena in Enhanced Oil Recovery.** Proceedings of a symposium, Stockholm, Sweden, Aug. 1979. Dinesh O. Shah, Ed. Plenum, New York, 1981. xiv, 874 pp., illus. \$95.

**Topical Questions in QCD.** Papers from a meeting, Copenhagen, June 1980. K. Hansen, P. Hoyer, P. Olesen, and J. L. Petersen, Eds. Royal Swedish Academy of Sciences, Stockholm, 1981. iv + pp. 863-1032, illus. Paper, Sw.kr. 220. *Physica Scripta*, vol. 23, No. 5:2.

# Personnel Placement

SCIENCE publishes each Friday, except the last Friday of the year. Advertising is accepted only in writing; no abbreviations. Also, personnel advertising is accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap, or sexual preference.

## CLASSIFIED ADVERTISING DEADLINES:

12 March issue (mailed 5 March): **19 February**  
19 March issue (mailed 12 March): **26 February**  
26 March issue (mailed 19 March): **5 March**  
2 April issue (mailed 26 March): **12 March**

**POSITIONS WANTED:** 40¢ per word, plus \$4 for use of box number, per insertion. \$10 minimum, per insertion. Prepayment required. This rate is available only to individuals seeking jobs.

**DISPLAY (POSITIONS OPEN, COURSES, FELLOWSHIPS, MARKETPLACE, and so forth):** \$9 per millimeter; \$225 minimum, per insertion (minimum charge covers 25 millimeters on a single column; 25 millimeters equals 10 lines of 50 spaces per line). No charge for use of box number. No agency commission for ads less than 103 millimeters (4 inches). No cash discount. Prepayment required for all foreign ads. Purchase orders and billing information required for all other advertising.

Send copy for all **Positions Wanted** ads and **Display** ads less than 1/6 page in size (125 millimeters) to:

SCIENCE, Room 207  
1515 Massachusetts Avenue, NW  
Washington, D.C. 20005  
Telephone: 202-467-4456

Send copy for **Display** ads 1/6 page and larger to:

Scherago Associates, Inc.  
1515 Broadway  
New York, N.Y. 10036  
Telephone: 212-730-1050

Blind ad replies should be addressed as follows:

Box (give number)  
SCIENCE  
1515 Massachusetts Avenue, NW  
Washington, D.C. 20005

## POSITIONS WANTED

**Biochemist.** Ph.D. 1976. Research experience in neurochemistry, membrane structure and transport, neural regulation of circadian rhythms, chronopharmacology. Seeks industrial, medical, academic research position in the Chicago area. Box 38, SCIENCE. X

**Biochemist, Financial Management.** M.B.A. (Harvard), Ph.D. (Purdue) in biochemistry with minors in organic chemistry and genetics with solid recent track record in business development and financial management. Interested in planning and financial management position at senior level in new or contemplated commercial ventures in recombinant DNA and related fields. Box 46, SCIENCE. X

**Cell Biologist/Electron Microscopist.** Ph.D., with experience and training in the biochemistry of contractile proteins, immunology, and light microscopy. Seeks a position in medical school, industry, or academia. Currently employed in an Ivy League x-ray microanalysis laboratory studying ion transport. Broad interests in cell biology and biomedical research. Publications. Can teach/train and perform/direct research in EM (including SEM and freeze-fracture), cell structure/function, cell motility, phagocytosis, and inflammation. Prefers tenure-track position for medical schools or academia. Salary: competitive. Available July 1982 with some flexibility. Box 50, SCIENCE. 2/19, 26

**Developmental Anatomist/Immunologist.** Ph.D. 1980. 1½ years of postdoctoral experience. Research experience: electron microscopy (TEM, SEM), cytochemistry, immunofluorescence, antibody purification, antibody-enzyme conjugation, cell surface antigen characterization, embryo dissection, organ culture, cell culture, working knowledge of hybridoma technology. Seeking research/teaching position, research associate position, or industrial research position. Box 44, SCIENCE. X

## POSITIONS WANTED

**Environmental Chemist/Agronomist.** Ph.D. Pesticide residue analysis of water, feed, fat, and soil. Adsorption study of farm wastes by soils. Effluent and leachate study. Strong background in GC, GPC, AA, and wet methods. EPA standard methods. Telephone: 601-373-0264 before 9 a.m. or after 5 p.m. CDT. Box 51, SCIENCE. 2/19; 3/5, 19; 4/2, 16

**Ph.D. 1975. Professional Fish Parasitologist:** Ten years of experience in teaching, research, fish disease diagnosis, histopathology, histotechnology, and photomicrography. Seeking teaching or research position. Box 57, SCIENCE. 2/19, 26

**Limnology/Aquatic Ecology, M.S., May 1982.** Seeking research position or academic assistantship in the aquatic sciences. Skills include biological/chemical water quality analysis, data analysis using SPSS and SAS programs, photomicrography, underwater photography, SEM, and flying (private pilot). Box 52, SCIENCE. 2/19, 26; 3/5, 12

**M.B.A. wants to help manage growing company.** Ph.D. in plant physiology. Skills in marketing, finance, strategic management, negotiations. Box 53, SCIENCE. 2/19, 26

**Nutritional/Biochemical Toxicologist.** Ph.D. Extensive experience: chemical/nutritional carcinogenesis, toxicology. Human cancer. Tissue culture. GLP. Independent publications. Teaching. Responsible position. Box 54, SCIENCE. 2/19, 26

**Physical Chemist/Radiochemist.** Ph.D. U.S.-educated university professor in India. Seeks visiting appointment. Long experience in interdisciplinary graduate research, teaching, and curriculum development. More than 50 publications. Box 55, SCIENCE. X

**Plant Biologist/Electron Microscopist.** M.S. Extensive research experience in cytochemistry, histochemistry, physiology, and cell cultures. Excellent background in biochemistry. Currently working in government facility as an electron microscopist; seeks position in research or industry in the Bay area, California. Box 56, SCIENCE. X

**Research Psychologist/Clinical Electroencephalographer.** Ph.D. Senior investigator with extensive experience seeks clinical-research position in psychiatric facility. Broad interests in research methodology and empirical study of biological-organic and neuropsychological variables operating in major psychiatric dysfunctions. Other interests involve ethical considerations in research and issues of informed consent. Numerous publications. Good record of obtained grants. Current rank of associate professor. Box 58, SCIENCE. 2/19, 26

## POSITIONS OPEN

### AGRICULTURAL/RENEWABLE RESOURCE SCIENTIST

The Rockefeller Foundation's Agricultural Sciences Division has a visiting research fellow position available at its New York City headquarters. Applicants should be recent Ph.D. graduates in the agricultural or natural sciences who have some professional experience in developing countries. The position involves research and program development responsibilities focused on sustainable agricultural production systems for fragile tropical environments such as nutrient-poor humid lowland regions. Approximately one-half time would be devoted to independent research on an appropriate topic with the remaining time spent assisting Foundation officers with program development activities. Applicants should send concise descriptions of their research interests, curriculum vitae, and names of three references to: **Director of Agricultural Sciences, The Rockefeller Foundation, 1133 Avenue of the Americas, New York, N.Y. 10036.**

**ANATOMY DEPARTMENT.** Two faculty positions (one histologist; one gross anatomist) are available for persons who will contribute to the teaching and research programs of the department. Rank and salary commensurate with training, experience, and documented productivity. Submit curriculum vitae and names, addresses, and telephone numbers of at least three persons from whom references may be obtained to: **Peter S. Amenta, Ph.D. Chairman, Department of Anatomy, Hahnemann Medical College and Hospital, 230 North Broad Street, Philadelphia, Pennsylvania 19102.**

An Equal Opportunity/Affirmative Action Employer

## POSITIONS OPEN

### DREXEL UNIVERSITY Nesbitt College Assistant/Associate Dean

Drexel University is a private urban university of 13,000 students. Nesbitt College of Design, Nutrition, Human Behavior, and Home Economics has an enrollment of 1,000.

**Responsibilities:** To promote interdisciplinary research among the departments of the college; to provide coordination between the college and university and community; to advise and coordinate student professional organizations within Nesbitt College; and to teach selected courses in areas of expertise.

**Qualifications:** Ph.D. or terminal degree; college teaching experience desired plus demonstrated leadership and administrative ability.

Salary commensurate with experience. The effective date of appointment is 1 September 1982. Applications with current résumé and list of three references should be submitted to:

**Dr. Margot P. Cleary  
Chairman, Search Committee  
Nesbitt College  
Drexel University  
Philadelphia, Pa. 19104**

## Associate Dean for Research and Sponsored Programs

Cornell University Medical College invites applications from qualified candidates for the position of Associate Dean for Research and Sponsored Programs. Appointee will be responsible for the management of the college's research grants and contracts and for the supervising of life safety, space allocation, and laboratory animal medicine programs.

The College seeks an individual with an M.D. degree and personal experience in basic scientific or clinical research. Preference will be given to applicants who have been responsible for institutional management of grants and contracts.

Applicants should submit  
curricula vitae to:

**Dr. Ann S. Peterson, Associate Dean  
CORNELL UNIVERSITY  
MEDICAL COLLEGE  
1300 York Avenue, New York, N.Y. 10021**

Equal Opportunity Employer, M/F/H

A tenure-track ASSISTANT PROFESSOR position is available at Northeastern University for an **EXPERIMENTAL PSYCHOLOGIST** with a Ph.D., specializing in the study of perception or perceptual development. Responsibilities include teaching, direction of research at undergraduate and graduate levels, and development of a research program. Strong background required in quantitative methods. To begin July or September 1982. Competitive salary. Initial applications should include curriculum vitae and copies of research publications. Send applications or inquiries to: **Professor B. Scharf, Chairman, Departmental Search Committee, Department of Psychology-282 NI, Northeastern University, Boston, Mass. 02115. Northeastern University is an Equal Opportunity/Affirmative Action Employer.**

**ASSISTANT PROFESSOR. GENETICIST** with expertise in population biology; September 1982; tenure track. Major responsibilities: Teach undergraduate and graduate courses in specialty; participate in periodic teaching of general biology to majors and/or nonmajors; direct M.S. and undergraduate research; and develop an active research program with potential for external funding. Qualifications: Ph.D. with postdoctoral research experience; commitment to quality teaching and research. Send curriculum vitae, undergraduate and graduate transcripts, a statement of research and teaching interests, and names and addresses of three references by 12 March 1982 to:

**Dr. Joseph A. J. Orkiszewski  
Chairman, Department of Biology  
Villanova University  
Villanova, Pa. 19085**

Villanova University is an Affirmative Action/Equal Opportunity Employer.

## POSITIONS OPEN

### ASSISTANT CURATOR/MAMMALS

The New York Zoological Society is accepting applications from qualified candidates for a curatorial position at the New York Zoological Park. An advanced degree and managerial experience in a zoological park are preferred. The applicant must have a strong desire to make the management of captive wild animals his or her lifework. The candidates must be able to write for technical and popular audiences, take charge of projects, manage animal care staff, establish care and feeding techniques, design exhibits, and identify and label specimens.

Send résumé stating salary requirements to:

**Timothy O'Sullivan, Deputy Director  
Administration  
New York Zoological Society  
185th Street and Southern Boulevard  
Bronx, N.Y. 10460**

**ASSISTANT PROFESSOR OF AGRONOMY**—New Mexico State University, Las Cruces, New Mexico. Position will involve both teaching and research in plant breeding and other aspects of crop science. Teaching will include undergraduate and graduate level teaching and advising. Major emphasis of research will be on the breeding of alfalfa for increased performance under less than optimal moisture conditions and tolerance to various forms of environmental stress. Ph.D. and training in plant breeding, physiology, and crop production required. Closing date is 1 April 1982. Contact: **Dr. James L. Fowler, Chairman, Search Committee, Department of Agronomy, Box 30, New Mexico State University, Las Cruces, New Mexico 88003.** Information contained in written applications for this position will be used in reports to HHS unless applicant prohibits this in writing. *New Mexico State University is an Equal Employment/Affirmative Action Employer.*

### ASSISTANT PROFESSOR OF BIOCHEMISTRY

A new tenure-track position will become available in September 1982. Preference will be given to candidates with two or more years of postdoctoral experience, established record of productivity, funded or pending research grant, and teaching experience. Candidates conducting research in any area are encouraged to apply but preference will be given to individuals with a strong interest in the area of nucleic acids (including protein synthesis). Duties will involve teaching graduate and/or introductory level biochemistry and molecular biology courses. The appointment is for 9 months at a salary commensurate with experience. Please submit curriculum vitae, research synopsis (two to three pages), and names and addresses of three references as soon as possible. Send material to: **Dr. Wesley Wicks, Department of Biochemistry, University of Tennessee, Knoxville, Tennessee 37996-0840.**

**UNIVERSITY OF CALIFORNIA, BERKELEY.** The Department of Psychology invites applications for a position as **assistant professor** (tenure track) in **biological psychology** beginning fall 1982. Persons with research interests in neuroethology, neural plasticity, and vision are especially encouraged to apply. Please send, by 1 March 1982, a résumé, research papers, and three letters of reference to: **Dr. Stephen Glickman, Chair, Department of Psychology, University of California, Berkeley, California 94720.** *The University of California is an Equal Opportunity/Affirmative Action Employer.*

### ASSISTANT OR ASSOCIATE PROFESSOR—MATHEMATICS

Tenure-track position to begin 1 September 1982. Salary commensurate with educational background and experience. Excellent fringe benefits package.

**Qualifications:** Ph.D. required with some background in one or more of the following areas preferred: applied mathematics, computer science, or operations research. Record of effective teaching at the college level and research desirable.

Complete job description available upon request. Send letter of application, curriculum vitae, and at least three letters of recommendation to: **Dr. Terrence Tripp, Chairperson, Division of Mathematics Science, University of Maine at Presque Isle, Presque Isle, Maine 04769.** Application deadline is 5 March 1982 or until applicant is employed.

The University of Maine at Presque Isle is an Equal Opportunity/Affirmative Action Employer and complies with Title IX guidelines.

## POSITIONS OPEN

**ASSISTANT PROFESSOR**, tenure-track position. Fall 1982. Ph.D. required. Specialization: **biophysical chemistry**. Interest in research with undergraduates desirable. Teaching areas: biochemistry, physical, polymer, beginning chemistry. Send curriculum vitae, transcripts, and three letters of recommendation to: **Chairperson, Chemistry Department, College of St. Catherine, St. Paul, Minn. 55105**. Review begins 22 March 1982. *An Equal Opportunity Employer*.

**ASSISTANT PROFESSOR, MICROBIOLOGY**. Tenure-track position available 1 July 1982. Candidates should have Ph.D. and demonstrated research productivity in microbial pathogenesis and/or one of the specialty areas of medical microbiology. Primary responsibilities include teaching of medical microbiology to medical and graduate students. The successful candidate will be expected to develop and maintain an independent research program in medical microbiology and supervise graduate students. Applicants should submit credentials, curriculum vitae, and three references by 1 June 1982 to: **Dr. Joseph V. Scaletti, Chairman, Department of Microbiology, University of New Mexico School of Medicine, Albuquerque, N.M. 87131**. *Affirmative Action/Equal Opportunity Employer*.

**ASSISTANT/ASSOCIATE/FULL PROFESSOR OF SOIL SCIENCE**. Applications are invited for a tenure-track faculty position available 1 July 1982. The area of specialization is applied soil physics with 70 percent research and 30 percent teaching commitments. Research should address physical problems which impair the agricultural performance of soils in New York State. Teaching responsibilities include an undergraduate course in applied soil physics and opportunity for development of graduate level course.

Applicants should send curriculum vitae, transcripts, and the names of three references to: **R. F. Lucey, Chairman, Department of Agronomy, Cornell University, Ithaca, New York 14853**. Application deadline is 31 March 1982.

*An Equal Opportunity/Affirmative Action Employer*

**ASSISTANT PROFESSOR OF SOIL SCIENCE**. Applications are invited for a tenure-track faculty position available 1 July 1982. The area of specialization is soil management and conservation with 70 percent extension and 30 percent research time commitments. Extension program should address the management and use of seasonably wet soils and soil erosion. Research should address the management and use of soils for crop production.

Applicants should send curriculum vitae, transcripts, and the names of three references to: **R. F. Lucey, Chairman, Department of Agronomy, Cornell University, Ithaca, New York 14853**. Application deadline is 31 March 1982.

*An Equal Opportunity/Affirmative Action Employer*

**UNIVERSITY OF FLORIDA** seeks an **ASSISTANT RESEARCH SCIENTIST IN MEDICINE** with an M.D. or Ph.D. degree. Candidate should have 1 to 2 years of postdoctoral research experience in cell biology or a related discipline. Candidate should have experience with scanning and transmission electron microscopy. Individual must have ability to instruct postdoctoral fellows and medical students and to assist in direction of their research activities within a large nephrology training program. Recruiting deadline: 1 April 1982. Anticipated starting date: 1 July 1982. Contact: **C. Craig Tisher, M.D., Department of Medicine, University of Florida, Box J-224, JHMHC, Gainesville, Florida 32610**. *An Equal Opportunity/Affirmative Action Employer*.

### BIOCHEMISTRY/CELL BIOLOGY MOLECULAR BIOLOGY

Faculty opportunities in **biochemistry** for investigator/teachers at **Georgetown University Medical Center** now exist. Applicants should have fundamental research interests aimed at the elucidation of basic cellular biochemical processes. A strong record of previous research achievement and the ability to develop independent research programs and funding are required. The faculty of the department participates in training medical, dental, and graduate students. Rank and salary commensurate with experience. Qualified individuals should send their curriculum vitae, a statement of research plans, and the names and addresses of three references to: **Dr. Gary Brooker, Chairman, Department of Biochemistry, Schools of Medicine and Dentistry, Georgetown University Medical Center, 3900 Reservoir Road, NW, Washington, D.C. 20007**.

*An Equal Opportunity/Affirmative Action Employer*

## POSITIONS OPEN

The Institute of Marine Science at the University of Alaska is seeking an **ASSOCIATE PROFESSOR OF MARINE SCIENCE** (marine biologist/biological oceanographer). Seward Marine Center resident scientist. The successful applicant must be able to plan, initiate, and conduct independent research in marine biology; act as the scientific coordinator of the program of the Seward Marine Center, including collaboration in the planning and implementation of that research program with other Institute faculty members; advise graduate students in thesis and dissertation research; and lecture in area of expertise. Applicant must have a Ph.D. degree in marine biology, biological oceanography, or related field; experience in scientific investigations at field stations; and must be capable of coordinating a multidisciplinary, multi-investigator research program, involving researchers from the main campus, 500 miles distance. Salary/rank will be dependent upon qualifications and experience. Closing date: 1 May 1982. Apply to: **Dr. Howard M. Feder, Institute of Marine Science, University of Alaska, Fairbanks, Alaska 99701**. *The University of Alaska is an Equal Opportunity/Affirmative Action Employer and Educational Institution*. Your application for employment with the University of Alaska may be subject to public disclosure if you are selected as a finalist.

### BIOCHEMISTS—MOLECULAR BIOLOGISTS

Tenure-track faculty positions at assistant and associate professor levels. Candidates should be interested in developing strong and independent research with long-term growth potential on the mechanisms of gene expression at the molecular level in either prokaryotic or eukaryotic systems. This area may be interpreted broadly from chemical-physical to genetic interests. Teaching includes medical, dental, and graduate students at sizable and rapidly expanding medical complex. Biochemistry department with excellent new facilities is undergoing substantial expansion. Salary commensurate with experience and competitive. Curriculum vitae, brief statement of present and future research interests, and three letters of recommendation should be sent to: **Dr. Robert D. Wells, Chairman, Department of Biochemistry, University of Alabama-Birmingham, Schools of Medicine and Dentistry, University Station, Birmingham, Alabama 35294**. *An Equal Opportunity/Affirmative Action Employer*.

**TENURE-TRACK OPENING IN BIOCHEMISTRY** at Illinois Wesleyan University (IWU). This appointment is an entry-level position for a biochemist with a strong background in organic chemistry. Organic majors with strong biochemistry will also be considered. IWU is an undergraduate-only university of 1650 students with an ACS-accredited Chemistry Department with four full-time members. By 15 March, send résumé and transcripts, and have three letters of recommendation sent to: **Dr. David N. Bailey, Department of Chemistry, Illinois Wesleyan University, Bloomington, Ill. 61701**. *IWU is an Equal Opportunity Employer*.

**BIOLOGY LABORATORY INSTRUCTOR**. Full-time appointment to teach laboratories in introductory biology courses including anatomy and physiology and microbiology, plus associated preparation time. M.A. or M.S. preferred (qualified B.A./B.S. will be considered). Send letter of application, curriculum vitae, and names of three references to: **Chairman, Department of Biology, Indiana University Northwest, 3400 Broadway, Gary, Indiana 46408**. Application deadline is 31 March 1982.

*An Equal Opportunity/Affirmative Action Employer*

### CHEMIST

**HARVARD MEDICAL SCHOOL** has an opening for a highly motivated Ph.D. research chemist to join radiographic contrast agent development team in the Department of Radiology at Brigham & Women's Hospital. Preference will be given to outstanding candidates in the fields of organic, medicinal, physical, colloid, biopolymer, and biochemistry. Salary and academic rank commensurate with experience. Send curriculum vitae, statement of career goals, copies of publications, and at least three references to:

**Douglass F. Adams, M.D.  
Department of Radiology  
Harvard Medical School  
Brigham & Women's Hospital  
75 Francis Street  
Boston, Mass. 02115**

*The institutions are Affirmative Action/Equal Opportunity Employers.*

## POSITIONS OPEN

**BIOCHEMIST/ORGANIC CHEMIST**. A position is available immediately for a postdoctoral staff research associate to work on the development of new photogenerated reagents including those useful for photoaffinity labeling, or to work on drugs directed toward specific classes of cells for use as chemotherapeutic agents or as immunosuppressants. The applicant should have expertise or an interest in one or more of: membrane biochemistry, the chemical modification of proteins and lipids, organic chemical synthesis, and photochemistry. Please send your curriculum vitae and the names of two references to: **Dr. Hagan Bayley, Department of Biochemistry, College of Physicians & Surgeons, Columbia University, 630 West 168 Street, New York, N.Y. 10032**.

*Columbia University is an Equal Opportunity/Affirmative Action Employer.*

### POSITIONS IN CANCER RESEARCH LABORATORY

Applications are invited, pending final budgetary approval, for two anticipated openings at the level of **assistant research biologist** (step I, \$22,900) to work on grant projects dealing with growth regulation and transformation of mammary epithelial cells in culture, as well as development of markers for identification of these cells. Requires Ph.D. with postdoctoral background and experience in the areas of primary culture of mammary epithelial cells, transplantation biology, and endocrinology or immunology. Starting date: 1 July 1982. Send curriculum vitae, bibliography with reprints, summary of research experience, and names of three references to: **Director, Cancer Research Laboratory, 230 Warren Hall, University of California, Berkeley, Calif. 94720**. Closing date for receiving applications is 31 March 1982. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

### CELLULAR IMMUNOLOGIST Lymphokines

Revlon Health Care Group subsidiary located in suburban Washington, D.C., is seeking a **cellular immunologist** to help expand R & D efforts for its very successful Interferon Program.

Qualified applicants should possess a Ph.D. with in-depth knowledge of lymphokines and their related assays, cell biology, and tissue culture.

We offer an excellent starting salary, liberal benefits, and company paid relocation. Interested applicants should submit résumé/curriculum vitae, in confidence, to: **Personnel Administrator,**

**MELOY LABORATORIES, INC.  
6715 Electronic Drive  
Springfield, Virginia 22151  
Equal Opportunity Employer**

### THE UNIVERSITY OF KANSAS Pharmaceutical Chemistry Department Department Chair with Distinguished Professorship

The University of Kansas invites nominations and applications for the position of department chairperson and distinguished professor in the Department of Pharmaceutical Chemistry. The department has traditionally emphasized pharmaceuticals, as well as analytical and pharmaceutical chemistry.

The individual who fills this position will have an international reputation in basic pharmaceuticals with interests in closely allied disciplines.

The successful candidate will:

- Evidence a strong research commitment in the chemical or biological sciences which relate to pharmaceuticals;
- Have successful experience in attracting research funding and in developing new funding opportunities in collaboration with other faculty;
- Be firmly committed to graduate and undergraduate education; and
- Demonstrate skills in administering research and/or academic units and budgetary resources.

This position will be available 1 July 1983. Applications and nominations received by 15 April 1982 will be given first consideration.

**Delbert M. Shankel, Chairman  
Pharmaceutical Chemistry Chairman  
Search Committee  
The Office of Academic Affairs  
The University of Kansas  
Lawrence, Kansas 66045**

*The University of Kansas is an Affirmative Action/Equal Opportunity Employer.*



## POSITIONS OPEN

**COMPARATIVE ANATOMIST**, assistant professor. Nontenure-track position available fall 1982. Annual appointment, not to exceed 3 years. Ph.D. required. Primary responsibilities will be teaching comparative anatomy and introductory courses and advising students. Send curriculum vitae, statement of teaching experience, official transcripts, and three current letters of reference by 1 April to: **E. Bruce McLean, Chairman, Department of Biology, John Carroll University, Cleveland, Ohio 44118. Equal Opportunity Employer.**

**CONNECTIVE TISSUE BIOLOGIST**. Available July 1982. Ph.D. required. Applicant should demonstrate a broad background in cell biology. The appointee will interdigitate with members of a connective tissue research group studying degenerative and inflammatory arthritides. Some knowledge of immunology and biochemistry desirable. Position at the level of senior research assistant. Salary negotiable. Please send curriculum vitae and names and addresses of three references to: **Roland W. Moskowitz, M.D., Division of Rheumatic Diseases, Case Western Reserve University, 2073 Abington Road, Cleveland, Ohio 44106. An Equal Opportunity Employer.**

## DEAN SCHOOL OF HEALTH SCIENCES University of Massachusetts at Amherst

The University of Massachusetts at Amherst invites nominations and applications for the position of Dean of the School of Health Sciences. The School of Health Sciences includes the divisions of Communication Disorders, Nursing, and Public Health, and offers degrees at the bachelor's, master's, and doctoral levels. Candidates should have administrative experience at least at the level of department head or its equivalent and scholarly accomplishments which would justify appointment to a professorial position. Nominations and applications should be sent by April 10, 1982, to: **Professor George Cernada, Chairperson, Search Committee for the Dean of the School of Health Sciences, c/o The Division of Public Health, Arnold House, University of Massachusetts, Amherst, Massachusetts 01003. An Affirmative Action/Equal Opportunity Employer.**

## DEPARTMENT OF KINESIOLOGY ENVIRONMENTAL PHYSIOLOGY OR BIOMECHANICS

Applications are invited for a tenure-track position, probably at the assistant professor level, starting 1 September 1982. Candidates would have a strong background either in environmental physiology or in biomechanics with a Ph.D. in a relevant field. A developed research program or a strong interest in ergonomics or human factors is highly desirable, and the appointee should be prepared to work on problems related to keeping people at work in alien or hazardous environments. The successful candidate would also have a strong teaching background. Excellent research facilities, including a well-equipped biomechanics laboratory and an environmental physiology laboratory with a deep diving chamber with a wet pot to 300 metres, and altitude chamber to 14,000 metres and a climatic chamber ranging from -30°C to +50°C with all associated laboratory facilities, are available.

Preference will be given to candidates eligible for employment in Canada at the time of application. Applications before 31 March to: **Dr. E. W. Banister, Department of Kinesiology, Simon Fraser University, Burnaby, British Columbia, Canada V5A 1S6.**

**EVOLUTIONARY BIOLOGIST**. The Department of Biological Sciences at the George Washington University invites applications for the position of assistant or associate professor to begin September 1982. Academic year (10 months) salary: \$18,000 to \$22,000, depending on experience. Applicants must have a Ph.D. The candidate should be prepared to teach undergraduate and graduate courses in evolution and parasitology or animal behavior and to initiate a strong research program. Responsibilities will include directing graduate and undergraduate research. Applicants should provide curriculum vitae, undergraduate and graduate transcripts, a list of publications, a list of courses the applicant is prepared to teach, a statement of future research plans, and three letters of reference. Applications should be sent to: **Dr. Stefan O. Schiff, Chairman, Department of Biological Sciences, The George Washington University, 2029 G Street, NW, Washington, D.C. 20052.** All applications must be completed by 30 March 1982. *The George Washington University is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**DIRECTOR OF ENVIRONMENTAL SCIENCE PROGRAM**. Barnard College seeks director of new undergraduate Environmental Science Program to teach/administer/develop the study of natural and built environmental systems as a separate scientific discipline. Applicants should have science Ph.D., academic and field experience in the environmental aspects of several sciences, and awareness of the engineering and cultural role of environmental systems. Rank and salary open. Send curriculum vitae and names of three references by 10 March 1982 to: **Dr. Wendy Fairey, Associate Dean of Faculty, Barnard College, 606 West 120 Street, New York, N.Y. 10027. Equal Opportunity Employer.**

## DIRECTOR, MARINE INSTITUTE The University of Georgia Sapelo Island, Georgia

Position available summer 1982. Salary negotiable. Candidates should have Ph.D. in a marine science and experience in management and administration of research operations. Ongoing program includes eight Ph.D.-level scientists involved in systems level research on estuarine and nearshore processes. Residence on island required. Additional information available from: **Marine Sciences, Ecology Building, University of Georgia, Athens, Ga. 30602.**

Application deadline: 31 March 1982. The position will not be filled unless qualified persons are available.

*The University of Georgia is an Equal Opportunity/Affirmative Action Institution.*

## FACULTY POSITION OPEN

**Associate/assistant professor of surgery**, Division of General Surgery, available in The University of Texas Medical School at Houston. A full-time tenure-track faculty position is open for an individual with training and demonstrated excellence in trauma surgery;

- 1) Board-certification, or
- 2) Board-eligibility required.

Applications, accompanied by curriculum vitae and full list of publications, should be addressed to: **Box 49, SCIENCE, An Equal Opportunity/Affirmative Action Employer.**

**FACULTY POSITION—PHARMACOLOGY/TOXICOLOGY**. Full time, tenure track. Assistant or associate professor rank, depending upon qualifications. Successful applicant will be expected to be able to enhance the capabilities of active research groups within the department and teach courses in environmental toxicology. Submit résumé, including current research summary and names of referees, to: **J. W. A. Burley, Ph.D., Head, Department of Biological Sciences, Drexel University, Philadelphia, Pa. 19104. An Equal Opportunity/Affirmative Action Employer.**

## GENETICIST

The School of Life and Health Sciences at the University of Delaware is seeking a geneticist whose primary teaching responsibility will be a course in human genetics for undergraduates and an advanced course in his/her area of interest. This is a tenure-track position and is expected to be filled at the assistant professor rank. The successful candidate will be a skilled experimentalist in any area of modern genetics. Preference will be given to candidates with experience in recombinant DNA techniques. The closing date for applications is 15 March 1982. Applicants should submit curriculum vitae, representative publication, and three letters of recommendation to: **Dr. Milton H. Stetson, Associate Director for Graduate Programs and Research, School of Life and Health Sciences, University of Delaware, Newark, Del. 19711.**

*The University of Delaware is an Affirmative Action/Equal Opportunity Employer.*

**Wanted: Ph.D. IN IMMUNOLOGY**; tenure-track appointment of assistant professor in the Department of Ophthalmology, University of Minnesota, applying principles of immunology to the eye. Interaction with Immunobiology Research Center. Primarily research and teaching. One year post-Ph.D. experience. Send résumé to: **Richard Lindstrom, M.D., Box 493 Mayo, University of Minnesota, Department of Ophthalmology, Minneapolis, Minn. 55455. University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from qualified women and minorities.** No applications accepted after 15 May 1982.

## POSITIONS OPEN

### GENETICIST

A tenure-track assistant professorship will be available in the Faculty of Natural Sciences beginning fall semester 1982. The successful candidate will be expected to teach an undergraduate course in genetics and a graduate course in his/her specialty, with occasional duties in instruction of introductory microbiology courses. Ph.D. required with postdoctoral experience favored. A strong commitment to teaching and the ability to develop an ongoing research program are expected. Affiliation with a hospital and/or laboratory possible, pending funding. Applications, including curriculum vitae, reprints, a statement of research goals, three letters of recommendation, and transcripts should be sent to: **Dr. James A. Gore, Faculty of Natural Sciences, University of Tulsa, Tulsa, Oklahoma 74104.** Deadline for receipt of applications is 15 March 1982. *The University of Tulsa is an Equal Opportunity/Affirmative Action Employer.*

## GEOLOGY POSITIONS AVAILABLE

Colby College is seeking two talented, enthusiastic, and motivated geologists to join the faculty in tenure-track positions for fall semester 1982. Preference will be given to persons who have strong interests and training in (i) geophysics and global tectonics and the applications of quantitative methods to geology and (ii) general geology, Northern Appalachian structure and stratigraphy, geomorphology, and glacial geology. A joint appointment in geology and physics is possible. Applicants should have a Ph.D. degree. A strong interest in undergraduate teaching and in research is essential. Colby College has new laboratories with modern instrumentation including EM and SEM facilities. Applicants should respond with a résumé, transcripts, a description of research interests, and three letters of recommendation by 31 March 1982 addressed to: **Professor Donaldson Koons, Chairman, Geology Department, Colby College, Waterville, Maine 04901.**

*Colby College is an Affirmative Action/Equal Opportunity Employer.*

## HERPETOLOGIST UCLA

The Department of Biology invites applications at the assistant professor, or more senior, level. The position is funded for the academic year 1982-1983. We anticipate that it will be made permanent. Teaching will include a one-quarter course on the biology of reptiles and amphibians, participation in a team-taught lower-division course, and the offering of an advanced course or seminar.

Applications are due by 1 April and should include curriculum vitae, copies of recent publications, a description of research goals, and the names of four individuals from whom we may request letters of appraisal. Send to:

**G. A. Bartholomew, Chair  
Herpetology Search Committee  
Department of Biology  
University of California  
Los Angeles, California 90024**

## INSTRUCTORSHIPS

- 1) Microbiology/Medical Technology
- 2) Earth Science
- 3) Physical Science

Qualifications: Applicants should have a minimum of a master's degree in their respective areas. Term of appointment: Temporary; renewable each year up to a maximum of 3 years. Effective date of appointment: fall semester 1982. To apply, submit a résumé of one page or less and a request for detailed job description before submitting additional credentials to: **Dean A. Rosebery, Head, Division of Science, Northeast Missouri State University, Kirksville, Mo. 63501.**

*An Equal Opportunity/Affirmative Action Employer*

## INSTRUCTOR/ASSISTANT PROFESSOR OF BIOLOGY

The College of St. Francis seeks to fill the following position: teach courses in cellular biology, microbiology, immunology, and general biology. Ph.D. preferred. **General information—Salary:** negotiable; **appointment:** 9 months, no tenure system but rather a system of multi-year rolling contracts; **appointment:** 16 August 1982; **application deadline:** 19 March 1982. **Application:** Letter of application, curriculum vitae, transcripts, and three letters of recommendation. Send to: **Olga Kraske, 500 Wilcox, Joliet, Illinois 60435. An Equal Opportunity Employer.**

## POSITIONS OPEN

**DEPARTMENT OF PATHOLOGY, UNIVERSITY OF ARIZONA COLLEGE OF MEDICINE, FORENSIC SCIENCES SECTION.** Applications are solicited for a (nontenured) faculty position in the following area: **FORENSIC PATHOLOGIST** with an appointment as deputy chief medical examiner, Pima County, and medical examiner in the other counties of the state of Arizona served by the Forensic Sciences Section of the Department of Pathology. The position requires a major commitment to the practice of forensic pathology, management of a medical examiner's office, and research, consultation, and teaching in forensic pathology. Minimum requirements are certification in anatomic, clinical, and forensic pathology or anatomic and forensic pathology with 3 years of forensic practical teaching and research experience. The position will carry appropriate academic status at the University requiring medical student and house officer contact. (Assistant or associate professor.) Applicants should send curriculum vitae to: Jack M. Layton, M.D., Head, Department of Pathology, University of Arizona College of Medicine, Tucson, Arizona 85724. *An Equal Opportunity/Affirmative Action/Title IX/Section 504 Employer.*

### ILLINOIS LEGISLATIVE SCIENCE INTERN

Sangamon State University invites applications from graduates (B.S., M.S., Ph.D.) of natural science or engineering programs for a 9½-month science internship beginning 1 October 1982 as part of the Illinois Legislative Staff Internship Program. The science intern will be assigned to the Illinois Legislative Council's Science Unit and will respond to legislators' requests for information and research about policy issues that involve science and technology. As part of the program, the science intern will participate in an academic seminar with other legislative interns. Applicants should be mature, self-motivated scientists or engineers with interests in public service. Send curriculum vitae by 1 April 1982 to: Dr. Kent Redfield, Coordinator, Illinois Legislative Staff Internship Program, Sangamon State University, Springfield, Illinois 62708. *An Equal Opportunity/Affirmative Action Employer.*

### MAMMALOGIST—One-year appointment—Full Time

Full-time salary, \$19,044 to \$22,896, for 1-year appointment, depending upon qualifications. Starting date: 23 August 1982. Teaching responsibilities: approximately half-time in mammalogy, with other assignments in introductory evolutionary biology, human anatomy, or courses and seminars in the candidate's area of specialization. Applicant should hold Ph.D. or equivalent degree by August 1982. Preference given to candidates with strong evidence of research as well as teaching. Submit curriculum vitae, transcripts, reprints, and three letters of recommendation by 15 May 1982 to: Dr. Richard Etheridge, Mammalogist Search Committee, San Diego State University, Zoology Department, San Diego, Calif. 92182-0063.

**MICROBIOLOGIST**, tenure-track appointment in Basic Medical Sciences Division.

Applicants should have a Ph.D. in microbiology, postdoctoral training; ability to teach both undergraduate medical as well as graduate students and develop an independent research program. Areas of microbiological research within the division include genetic regulation in viruses, bacteria, and lower eukaryotes as well as receptors for bacterial and eukaryotic viruses. Both men and women are encouraged to apply for this position and applications are invited from Canadian citizens, permanent residents, and others eligible for employment in Canada. Applicants should forward curriculum vitae, a brief statement of research plans, and the names of scientists who can provide letters of reference to: Dr. S. M. Boyle, Faculty of Medicine, Memorial University of Newfoundland, St. John's, Newfoundland, Canada A1B 3V6.

### MOLECULAR BIOLOGY OF CELLULAR AGING

Applications are invited for a tenure-track position as assistant professor in a dynamic, interactive research environment centered on molecular/genetic studies of cellular aging. Preference given to those with background in genomic organization and expression or related areas. Apply with curriculum vitae and names and addresses of three references to: Dr. Samuel Goldstein or Dr. Robert Shmookler Rels, Slot 604, Departments of Medicine and Biochemistry, University of Arkansas for Medical Sciences, 4301 West Markham, Little Rock, Arkansas 72205.

Journal Announcement

## National Cancer Institute National Institutes of Health Public Health Service Department of Health and Human Services Division of Cancer Treatment

### ASSOCIATE DIRECTOR, CANCER THERAPY EVALUATION PROGRAM Division of Cancer Treatment National Cancer Institute

The National Cancer Institute (NCI) develops the overall national strategy against cancer, coordinates federal government and non-federal government cancer programs, and supports international programs of cancer research.

The Division of Cancer Treatment is responsible for directing the NCI's major research effort related to the treatment of cancer. The Cancer Therapy Evaluation Program of the Division of Cancer Treatment monitors and sponsors clinical trials for cancer therapies. This extramural program supports the investigation of therapeutic modalities through the use of grants, contracts, and cooperative agreements. In fiscal year 1981 the program had a budget of approximately \$128,000,000 and a staff of 50 persons.

This is a civil service position in the Senior Executive Service (SES) with a salary range from \$54,755 to \$61,300 (currently limited to \$58,500 per annum). Candidates may be eligible for Physicians Comparability Pay up to \$10,000 per year. (Alternately candidates may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service). The individuals selected, if not presently in SES, must serve a one year probationary period.

The mandatory professional/technical qualifications for the position require that candidates:

1. meet the minimal educational requirements for a Medical Officer, GS-602 as defined by the U.S. Office of Personnel and Management Handbook X-118 (Qualifications Standards for Positions Under the General Schedule), which is available in Federal Personnel Offices;
2. have clinical and biomedical research experience and knowledge of research programs related to the treatment of cancer. Clinical experience must include the management of all treatment modalities: surgery, radiotherapy, medical oncology, and biological response modifiers. Candidates must have participated in clinical trials using at least one of the mentioned modalities and must have managed trials of a multimodal nature;
3. be licensed and qualified to provide care to patients in NCI research clinical trials.

The managerial/executive qualifications are:

Experience as Director of a clinical research program of substantial size including the specialties, Surgery, Radiotherapy, and Medical Oncology, demonstrating the competence to assume leadership responsibilities in:

1. Assuring that national and agency goals and priorities are considered in carrying out the functions and responsibilities of the organization;
2. establishing and maintaining relationships with key individuals and groups outside the organization;
3. directing and guiding programs and projects, including long-term and short-term planning and establishing objectives and priorities;
4. establishing procedures for the development and defense of the organization's budget, and allocating fiscal and personnel resources to support program implementation;
5. developing and implementing procedures for monitoring program performance, including periodic analysis and evaluation; and
6. developing processes and overseeing activities to implement EEO objectives and to assure the fair and equitable employment of qualified persons.

Candidates who meet the mandatory requirements will be evaluated by the search committee on the following factors: scientific reputation/peer recognition; training and education; honors and awards; and the degree to which they exceed the minimally qualified level of the mandatory professional/technical and managerial/executive qualifications. Additional information may be obtained from Ms. Susan Corey, Personnel Management Specialist, NCI (301) 496-6862.

Applications (personal qualifications statement SF-171) are to be sent to the above individual at: **The National Cancer Institute, Bldg. 31, Rm. 3A34, Bethesda, Maryland 20205.** A current curriculum vitae and bibliography must accompany all applications. Applications of women and/or minority group members are especially solicited.

The National Institutes of Health is an EQUAL OPPORTUNITY EMPLOYER.

APPLICATIONS MUST BE POSTMARKED NO LATER THAN MARCH 1, 1982.

## POSITIONS OPEN

### MARINE BIOLOGIST UNIVERSITY OF MIAMI

Tenure-track position available fall 1982 in the Department of Biology involves divided responsibilities: 50 percent research and teaching, 50 percent administration of interdepartmental undergraduate Marine Science Program (approximately 300 students). Appointment as **assistant** or **beginning associate professor**; rank and competitive salary commensurate with qualifications and experience. Applicants should have Ph.D. or equivalent with specialization in marine biology, broad background in marine science, and demonstrated administrative, research, and teaching abilities. Tropical interests preferred. Request letters from three references; submit curriculum vitae, recent reprints, and names of references by 5 March to: **Marine Science Search Committee, Department of Biology, Box 249118, University of Miami, Coral Gables, Fla. 33124.**

*An Equal Opportunity/Affirmative Action Employer*

**MEDICAL ONCOLOGIST/IMMUNOLOGIST:** Geographic full-time position for a **CLINICAL INVESTIGATOR** in the Department of Medicine, The University of Tennessee College of Medicine/Knoxville Unit. Major responsibilities include undergraduate, graduate, and continuing medical education; active participation in patient care and in an NIH-funded immunology basic and clinical research program concerning multiple myeloma and related diseases. Internal medicine and state Board-certification or -eligibility desired. Position requires a minimum of 3 to 5 years of postdoctoral clinical and research experience, demonstrated leadership capabilities, and ability to conduct independent research involving cellular/molecular immunology and oncology or to develop a human tumor stem cell assay. Position available immediately. Salary, including fringe benefits, and academic rank commensurate with education and experience. Letter of application, curriculum vitae, and names and addresses of three reference sources should be sent to: **Alan Solomon, M.D., Professor, Department of Medicine, The University of Tennessee, College of Medicine/Knoxville Unit, 1924 Alcoa Highway, Knoxville, Tennessee 37920.** *An Affirmative Action/Title IX/Section 504 Employer.*

**MICROBIOLOGIST/ACTINOMYCETE TAXONOMIST.** Career federal service. Opportunity for a qualified research professional to conduct basic and applied studies on the taxonomy and biology of Actinomycetales of importance to agriculture. Individual will also be responsible for the Actinomycete Collection of the ARS Culture Collection (NRRL). Salary based on qualifications and experience. GS 11/12-level position. Position located at the Northern Regional Research Center, Peoria, Illinois. Send curriculum vitae and references to: **Dr. C. P. Kurtzman, ARS Culture Collection, Northern Regional Research Center (S), U.S. Department of Agriculture, 1815 North University Street, Peoria, Ill. 61604.** Telephone: 309-685-4011. *Equal Opportunity Employer.*

The Department of Biological Sciences of the University of California, Santa Barbara, invites applications for an anticipated tenure-track appointment in **MICROBIOLOGY AND IMMUNOLOGY**. Salary and rank will be commensurate with qualifications and experience. The position will probably be at the assistant professor level although all qualified applicants will be considered. Applicants should be qualified to teach medical microbiology. Candidates are also expected to develop an active research program. Preference will be given to those candidates who have experience at the cellular, molecular, and genetic level in the study of the immune response to microbial or viral infections.

Applicants should submit curriculum vitae, a summary of teaching interests and research experience, and the names of three references to: **Chairman, Department of Biological Sciences, University of California, Santa Barbara, California 93106.** Applications must be postmarked no later than 15 March 1981. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

**ORGANIC CHEMIST.** We are a young, dynamic biotechnology company located in highly desirable San Diego near University of California, San Diego, Scripps Clinic, and Salk Institute, with an immediate opening for a Ph.D. in organic chemistry to conduct publishable research on nucleotide and drug synthesis. Our major involvements are in the areas of drug delivery and recombinant DNA. Send résumé, reprints, and at least three references to: **Dr. Lyle Arnold, Ph.D., Kendrew Biosystems, Inc., 11180 Roselle Street, Suite A, San Diego, Calif. 92121.**

## POSITIONS OPEN

**MOLECULAR BIOLOGIST/CELL BIOLOGIST.** The Department of Biological Sciences at Drexel University is seeking an experienced investigator in some field of molecular biology. Monoclonal antibody, hybridoma, nucleic acid sequencing, fermentation screening, and cell fusion are some examples of technologies our department is interested in developing. Applicants should submit a résumé, including a summary of current research and names of referees, to: **J. W. A. Burley, Ph.D., Head, Department of Biological Sciences, Drexel University, Philadelphia, Pa. 19104.** *An Equal Opportunity/Affirmative Action Employer.*

### NEUROANATOMIST

A tenure-track position at the **ASSISTANT PROFESSOR** or **ASSOCIATE PROFESSOR** level is available in the Department of Anatomy, University of California, San Francisco. Teaching responsibility will be in neuroanatomy to medical, dental, podiatry, and graduate students. The area of research should be somatosensory systems, with a particular emphasis on the control of pain, studied with electrophysiological and ultrastructural immunocytochemical techniques. Applicants should hold the Ph.D. or M.D. degree and have postdoctoral experience. The committee will consider excellence in teaching and proven ability to attract research funds as major criteria for selection. Applicants should submit their curriculum vitae, bibliography, and the names of three references to: **Dr. J. H. LaVail, Department of Anatomy, School of Medicine, University of California, San Francisco, California 94143.** Deadline for application is 5 March 1982. *The University of California is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minority persons.*

University of Michigan Medical School, **DEPARTMENT OF OBSTETRICS AND GYNECOLOGY**, is seeking a **faculty member** at the level of instructor through professor to initiate a program that will provide gynecologic and obstetrical care for the large University of Michigan student body through the University Health Service. In addition, the individual will have responsibility for coordinating and staffing the obstetrical and gynecological training of family practice residents rotating through the Department of Obstetrics and Gynecology as well as in satellite programs. Board-certification or -eligibility in obstetrics and gynecology is required. Please direct inquiries and curriculum vitae to: **Alan E. Beer, M.D., Professor and Chairman, Department of Obstetrics and Gynecology, L2122 Women's Hospital, University of Michigan Medical Center, Ann Arbor, Mich. 48109.** *A nondiscriminatory, Affirmative Action Employer. Code 08DO.*

University of Michigan Medical School, **DEPARTMENT OF PSYCHIATRY**, has two full-time positions available at the instructor or assistant professor level as **staff psychiatrists** with the Adolescent Psychiatry Service. Responsibilities include teaching and supervision of residents, fellows, and medical students in the Inpatient and Partial Hospitalization Programs. Involvement in ongoing research in affective disorders and other projects is desirable. Tenure-track appointments at academic rank appropriate to qualifications and experience. Send curriculum vitae and names and addresses of three references to:

**Douglas R. Robbins, M.D.**  
Department of Psychiatry, Box 050  
University of Michigan Hospital  
3000 North Ingalls  
Ann Arbor, Mich. 48109

*A nondiscriminatory, Affirmative Action Employer. Codes 56FO, 80HO.*

### PHYSIOLOGY/PHARMACOLOGY

Applications are invited for two faculty positions available 1 July 1982. Candidates must have a Ph.D. or equivalent degree. One position requires preparation to teach a variety of topics in human physiology (a minor in pharmacology is desirable). The second position requires broad-based training in medical pharmacology (a minor in physiology is desirable). Research interests are open. Rank and salary dependent upon qualifications. Teaching responsibilities may involve medical, podiatric, and physicians' assistant training programs. Send curriculum vitae and names of three references to: **William J. Dyche, Ph.D., Associate Dean of Pre-Clinical Affairs, University of Osteopathic Medicine and Health Sciences, 3200 Grand Avenue, Des Moines, Iowa 50312.** *Equal Opportunity Employer.*

## POSITIONS OPEN

### PATHOLOGIST

Expansion of the research management team of a major pharmaceutical firm has created a career opportunity for a pathologist to be responsible for the anatomical pathology of the Toxicology Department.

The ideal candidate will hold a D.V.M. or M.D. degree and have 3 to 5 years of experience developing histopathological data and preparing reports for submission to regulatory agencies. Board-certification would be considered a distinct plus. This position will be responsible for monitoring projects conducted in contract laboratories.

Excellent benefits and competitive salary complement this professionally challenging opportunity. A. H. Robins is headquartered in a Southern metropolitan atmosphere within convenient commuting distance to Washington, D.C., the seashore, and the mountains.

Interested candidates should send résumé, including salary requirements, to:

**Manager, Personnel  
Research & Development Division  
A. H. ROBINS CO.  
1211 Sherwood Avenue  
Richmond, Virginia 23220**

Or see our representative in Boston at the Placement Center during the meeting of the Society of Toxicology.

*Equal Opportunity Employer, M/F*

### INVESTIGATION OF PATHOPHYSIOLOGY OF MECHANICAL BRAIN INJURY AND DYSFUNCTION

The Division of Neurosurgery at the Medical College of Virginia, Virginia Commonwealth University, Richmond, Virginia, is seeking qualified basic scientists, physiologists, neuroscientists, experimental psychologists, pharmacologists, physicists, and so forth, with broad scientific backgrounds, to work in a highly productive, dynamic, multidisciplinary group of M.D.'s and Ph.D.'s dedicated to the study of the pathophysiology of human brain injury and dysfunction. Cerebral blood flow and metabolism, brain electrophysiology, intracranial pressure measurements, and so forth, are among the many parameters under investigation in the patients. The opportunity for scientific growth and career advancement is excellent. Salaries are very competitive and secure. Send curriculum vitae and particulars to:

**Donald P. Becker, M.D.**  
Director, Brain Injury Research Center  
MCV Station—Box 508  
Richmond, Virginia 23298

### PEDIATRIC CARDIAC SURGEON Lansing, Michigan—Ingham Medical Center and Michigan State University

Board-eligible or -certified by American Board of Thoracic Surgery. Experience in academic pediatric cardiac surgery program required. Position involves academic appointment, an integral role in private practice cardiovascular surgery group, and institutional responsibility for pediatric cardiac surgery program. Academic requirements include program development; teaching and training of medical and nursing students and house officers; and direction or participation in research programs. Contact: **Park W. Willis, III, M.D., Chairman, Pediatric Cardiac Surgery Search Committee, B 220 Life Sciences, Michigan State University, East Lansing, Mich. 48824.**

**POSTDOCTORAL POSITION** available immediately for a recent Ph.D. in biochemistry or molecular biology. Experience in enzymology, protein chemistry, or nucleic acid biochemistry desired. Basic research on structure-function-regulation of bacterial enzymes. Depending on individual's interest, number of projects available are: enzyme active-site studies, isolation (by HPLC) and automated sequence analysis of covalently modified regulatory-site peptides, gene cloning and DNA sequence analysis, genetic regulatory mechanisms in enzyme induction, and molecular evolution of protein structure. Competitive stipend plus benefits. Send curriculum vitae and reprints of papers or thesis abstract and have three letters of recommendation sent to: **Professor P. Datta, Department of Biological Chemistry, Box 034, The University of Michigan Medical School, Ann Arbor, Mich. 48109.** *A nondiscriminatory, Affirmative Action Employer.*



THE AUSTRALIAN INSTITUTE  
OF MARINE SCIENCE  
RESEARCH POSITION  
COASTAL ZONE RESEARCHER

The Australian Institute of Marine Science was established as a Statutory Authority of the Commonwealth government in 1972 and in 1977 moved into a modern, comprehensively equipped laboratory complex at Cape Ferguson near Townsville. The Institute is well situated for studies in tropical marine science including phenomena at the land-sea interface, on the complex environment and living communities of the Great Barrier Reef and in adjacent seas. The ongoing programs of the Institute are augmented by active collaboration and interaction with visiting investigators from research organizations within Australia and overseas.

**Applications** are invited from researchers with interests and experience in coastal zone systems to accept a pivotal responsibility in programs concerned with the mangroves and mangrove-dominated coastlines of tropical Australia. These studies are intended to develop a basic understanding of these systems, of their dynamics, productivity, their essential physical, chemical, and biological processes and how these operate with variation in location and through time. Several aspects of this undertaking are already in progress and the intention now is to build on and expand that base.

**Qualifications:** The appointee must possess Ph.D.-level qualifications in an appropriate field of the physical, chemical, or biological sciences and a background and range of interests appropriate to the nature of the broad objectives described.

**Salary:** The salary offered and the level of the appointee will be commensurate with the qualifications and experience of the successful candidate.

Enquiries and applications, including complete curriculum vitae and the names of at least three but not more than five referees, should be forwarded to: **The Secretary, Australian Institute of Marine Science, P.M.B. Number 3, M.S.O. Townsville, Queensland, 4810, AUSTRALIA.**

Closing date for applications is 31 March 1982.

AUSTRALIAN INSTITUTE  
OF MARINE SCIENCE  
POSTDOCTORAL AWARDS

The Australian Institute of Marine Science is a Statutory Authority established in 1972. Its functions are to carry out research in marine science, to assist other persons and institutions engaged in research in this field, and to disseminate information relating to marine science.

The Institute is located in modern facilities at Cape Ferguson, 50 kilometers from Townsville in the central section of the coast adjacent to the Great Barrier Reef.

A number of **postdoctoral awards** are granted each year by the Council of the Institute for research by scientists of exceptional promise and proven capacity for original work in the area of marine science.

The awards are tenable at the Institute for periods of up to 2 years. Tenure of an award is expected to commence within 3 months of the award being made.

The Institute is especially interested in researchers attracted to collaborative studies of mangrove and reefal environments and communities within its established programs although awards are not limited to these fields. Background information on the Institute and its program interests will be supplied on request.

In general, awards are restricted to applicants who are not more than 30 years of age on the date when applications close, or who, in any case, are in the early stages of their postdoctoral career.

**Stipend:** \$19,162 per annum.

**Allowance:** A district allowance of \$430 per annum for awardees with dependents and \$220 per annum for awardees without dependents is payable.

**Applications:** Persons wishing to apply for these awards should submit complete curriculum vitae, the outline of a projected investigation, support requirements, and the names of three professional referees to: **The Secretary, Australian Institute of Marine Science, PMB Number 3, M.S.O. Townsville, Queensland, 4810, Australia.**

Applications should be submitted no later than 31 March 1982.

## RESEARCH BIOCHEMISTS

**Join the company  
who is a leader  
in energy  
and environmental  
technology!**

Developing new technologies and products for a bright future is what we're doing at UOP Inc. Our continued growth and desire to remain in the forefront has created outstanding career opportunities for professionals in the following areas:

### BIOCHEMIST (PhD)

Individual to carry out research using genetic manipulation and recombinant DNA technology to create products that are useful in such diverse areas as the energy, food and chemical industries. The ideal candidate, in addition to a PhD in Biochemistry, will have conducted post graduate work in molecular biology and have experience with gene cloning techniques and microbial genetics. Prior experience with higher plant systems is preferred.

### BIOCHEMIST (PhD)

Opportunity to utilize training and experience in microbiology and fermentation for the production of enzymes and chemicals. Desired fermentation background would emphasize an understanding of the metabolic pathways related to microorganism growth and enzyme/chemicals production rather than parametric studies leading to process optimization.

Our Research Center is located in a highly desirable community northwest of Chicago and provides an atmosphere to challenge your professional abilities. Excellent salaries and comprehensive benefits package that includes profit sharing and dental insurance are provided. For prompt consideration, please send your resume and salary history and a summary of your research experience and a list of publications to:

Manager, Employee Relations Corporate Research Center

**UOP Inc.**

Ten UOP Plaza Des Plaines, Illinois 60016  
An Equal Opportunity Employer M/F/V/H

## CEO Contract Bioresearch

An exceptional opportunity exists to lead a team of talented and dedicated professionals and technicians in a profitable contract bioresearch activity with a good international reputation. The successful candidate will enjoy the challenge and rewards of expanding the existing client base, with major emphasis on the pharmaceutical industry, while maintaining our reputation for timeliness and quality.

Requirements for the position include an appropriate doctorate degree, experience with contract research in the pharmaceutical industry, strong

marketing abilities, and profit and loss experience.

An excellent compensation and benefits package, combined with **RURAL WESTERN OHIO LOCATION**, make this an attractive career opportunity.

Please forward application in strictest confidence indicating salary requirements to C.S. Cridler-Smith: Manager, Human Resources, **SPRINGBORN INSTITUTE FOR BIORESEARCH, INC.**, a member company of Springborn Group, Inc., One Springborn Center, Enfield, CT 06082. An equal opportunity/affirmative action employer m/f.



**SPRINGBORN  
INSTITUTE FOR  
BIORESEARCH, INC**

## POSITIONS OPEN



GENEX is expanding its program in yeast molecular genetics and is seeking a Ph.D. with experience in gene expression and/or regulation or other modern approaches to the study of yeast genetics.

GENEX offers a stimulating, cooperative research and business environment, competitive salaries and fringe benefits, and excellent facilities. GENEX is located in Rockville and Gaithersburg, Maryland, and is a rapidly growing biotechnology center 20 miles from Washington, D.C. Statements of personal research goals, publications, three references, and salary requirements should be submitted, in confidence, to:

GENEX Corporation  
Personnel Department  
Department F  
6110 Executive Boulevard  
Rockville, Md. 20852

**PLANT COMMUNITY AND ECOSYSTEM ECOLOGIST.** The Department of Biological Sciences, University of California, Santa Barbara (UCSB), invites applications for an anticipated tenure-track position at the assistant professor level for appointment beginning fall 1982. Applicants must have a broad understanding of terrestrial communities and ecosystems and of the role of plants in these systems. Particularly desirable areas of expertise include, but are not limited to, nutrient cycling, productivity, demography, interference, and plant/animal interactions. A vigorous, extramurally funded research program is expected. Teaching duties will include graduate and undergraduate courses in community and ecosystem ecology and participation in the botanical portions of an introductory biology course.

Applicants should send curriculum vitae, a statement of research interests, and the names of at least three individuals willing to provide references to: Chairman, Department of Biological Sciences, University of California, Santa Barbara, Santa Barbara, California 93106. Deadline for receipt of applications is 15 March 1982. UCSB is an Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITION** available for biochemist to work on the mapping of functional sites in ribosomes and ribosomal RNA by photoaffinity and recombinant DNA techniques. Support available for 1 to 4 years beginning 1 June 1982. Send résumé and three letters of reference to: Dr. Robert A. Zimmerman, Department of Biochemistry, University of Massachusetts, Amherst, Mass. 01003. An Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITION IN BASIC PATHOLOGY** available 1 July 1982. Initial appointment is for 1 to 2 years with opportunities for renewal for a subsequent year. Emphasis will be on research training in cell differentiation related to pathobiology. Applicants having an M.D., a Ph.D., or both degrees will be considered. In the case of those with a Ph.D., trainees focusing on disease mechanisms will be favored. Applicants should send curriculum vitae, biographical sketch, a statement of career objectives and of the anticipated value of training to be undertaken, transcripts of graduate course work, three letters of recommendation including one from the intended research sponsor, and an outline of proposed research to: Dr. G. S. Getz, The University of Chicago, Department of Pathology, 950 East 59 Street, Chicago, Ill. 60637. Deadline for receipt of applications: 15 March 1982.

**POSTDOCTORAL FELLOW AND/OR RESEARCH ASSOCIATE** position available immediately in Department of Anatomy and Physiology, Kansas State University (KSU), for studies on simple nervous systems using immunofluorescence and electron microscopic techniques. Preference will be given to candidates with biochemical expertise and experience in electron microscopy. Salary commensurate with experience. Send curriculum vitae with letters of recommendation or names of references to: Dr. Jane A. Westfall, Department of Anatomy and Physiology, Kansas State University, Manhattan, Kansas 66506. KSU is an Equal Opportunity/Affirmative Action Employer.

## POSITIONS OPEN

### POSTDOCTORAL POSITIONS IN RECEPTOR RESEARCH

**POSTDOCTORAL POSITIONS** available at research associate or senior research associate level for candidates with interest in purification and biochemical characterization of adrenergic receptors. Candidates should have strong biochemical background. Relevant postdoctoral experience preferable but not required. Salary and term are flexible and commensurate with background and experience. Send curriculum vitae and references to:

M. G. Caron or R. J. Lefkowitz  
Howard Hughes Medical Institute Laboratory  
Duke University Medical Center  
Durham, North Carolina 27710

Equal Opportunity/Affirmative Action Employer

The Natural Resource Ecology Laboratory and the Range Science Department invite applications for a **POSTDOCTORAL FELLOW** position. Research will be on structure of grassland plant communities, soil/plant relationships, and theory of plant community dynamics and ecosystem behavior. The successful candidate will participate in a team with soil scientists, geomorphologists, and hydrologists to determine relationships among soil properties, hydrological cycle, and plant community structure. Two-year appointment as part of a NSF-sponsored Long-Term Ecological Research Program. Ph.D. required, with specialization in quantitative plant ecology, range science, or related field. Closing date: 1 April 1982. Salary: \$18,000 for 12 months, to begin 1 June 1982. Send curriculum vitae and names, addresses, and telephone numbers of three individuals for references to: Dr. W. K. Lauenroth, Chairman, Search Committee, Range Science Department, Colorado State University, Fort Collins, Colo. 80523, by 1 April 1982.

Colorado State University is an Equal Opportunity/Affirmative Action Employer. Equal Opportunity Office: 314 Student Services Building.

**POSTDOCTORAL POSITIONS** available immediately for studying the control of cell proliferation by hormones. Areas of study include identification of calmodulin systems activated by hormones, the characterization of substrates of cAMP-dependent phosphorylation that block proliferation, and the analysis of cytoplasmic factors that induce chromosome condensation and cell division when microinjected into living cells. A background in biochemistry, cell biology, or zoology preferred. Competitive salary. Send curriculum vitae and three letters of recommendation to:

Dr. James L. Maller  
Department of Pharmacology, C236  
University of Colorado School of Medicine  
Denver, Colorado 80262

The University of Colorado is an Equal Opportunity Employer.

### POSTDOCTORAL POSITION

The Department of Physiology in St. Louis University has a vacancy for a postdoctoral trainee supported by a NIH Training Grant in cardiovascular physiology and metabolism. Candidates should hold a Ph.D. or equivalent degree and should have demonstrated expertise in the areas of interest of the training grant. Send applications to: Dr. Alexander R. Lind, Professor and Chairman, Department of Physiology, St. Louis University Medical Center, 1402 South Grand Boulevard, St. Louis, Mo. 63104. An Equal Opportunity/Affirmative Action Employer M/F/H.

**POSTDOCTORAL POSITION** for recent Ph.D. or M.D., U.S. citizen or permanent resident. Available immediately; supported by NIH Training Grant (National Research Service Award) in the area of mammary tumor immunology and virology. Candidates should have a strong background in biochemistry or in molecular genetics and recombinant DNA technology. Send résumé, indicating area(s) of interest, and two or more letters of reference to: Professor P. B. Blair, Cancer Research Laboratory, University of California, Berkeley, Calif. 94720. The University of California is an Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITION** available starting as soon as possible for molecular biological studies on the structure and differentiation of immunoglobulin genes in the mouse and/or human. Send a letter describing present research and dissertation research (if different), curriculum vitae, and names and telephone numbers of three references to: Dr. Janet Stavnezer, Sloan-Kettering Institute, 1275 York Avenue, New York, N.Y. 10021. An Equal Opportunity Employer.

## POSITIONS OPEN

**POSTDOCTORAL POSITION AVAILABLE.** Studies of in vivo and in vitro regulation of insulin receptors and action in fat cells and tissue. Experience in biochemistry and/or physiology preferred for this basic science oriented laboratory. Position available 1 July 1982. Contract: Dean H. Lockwood, M.D., Chief, Endocrine-Metabolism Unit, Department of Medicine, University of Rochester Medical Center, Rochester, N.Y. 14642. An Equal Opportunity Employer.

**POSTDOCTORAL ASSOCIATE IN PLANT MOLECULAR BIOLOGY.** To study (i) the organization and function of crop plant DNA associated with cytoplasmic male sterility and (ii) mitochondrial DNA variability in plants derived from protoplast cultures. Ph.D. in biochemistry or related field and experience in recombinant DNA technology is required. Availability date: 17 March 1982. Send curriculum vitae, transcripts, reprints, and three letters of reference to: Dr. Roger J. Kemble, Department of Plant Pathology, Kansas State University, Manhattan, Kansas 66506.

**POSTDOCTORAL POSITION** available 1 April 1982 for individual trained in neuroanatomy. Experience required with either immunohistochemistry, HRP histochemistry, autoradiography, or electron microscopy. Participate in developmental studies of basal ganglia. Send curriculum vitae and names of two references to: Dr. A. M. Adinolfi, Room 58-225, Mental Retardation Research Center, Neuropsychiatric Institute, 760 Westwood Plaza, University of California, Los Angeles, Center for Health Sciences, Los Angeles, California 90024. An Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION—IMMUNOLOGY** is available for research on the structural and functional role of Ia antigens in antigen presentation to T helper cells. Send curriculum vitae and names of three references to: Dr. David McKean, Department of Immunology, Mayo Clinic, Rochester, Minn. 55901. An Equal Opportunity/Affirmative Action Institution.

**POSTDOCTORAL POSITION** available in April 1982 for Ph.D. with strong interests in problems relating to porphyrin and heme synthesis. Require experience in protein purification and molecular biology. Send curriculum vitae and three references to: Nader G. Ibrahim, Ph.D., Department of Medicine, New York Medical College, Valhalla, New York 10595.

New York Medical College is an Equal Opportunity Employer.

**POSTDOCTORAL POSITION** for study of the molecular biology of mammary tumor promotion by dietary fat. Available for person with strong background in cell culture, lipid chemistry, prostaglandin, and hormone analysis. Send curriculum vitae and three references to: Leonard A. Cohen, Ph.D., Division of Nutrition, American Health Foundation, Dana Road, Valhalla, N.Y. 10595. Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL RESEARCH ASSOCIATE** position available immediately to study gene expression and its regulation in eukaryotes. Studies will involve hybridoma and recombinant DNA technologies and in vitro transcription systems. Salary is dependent upon experience. Send curriculum vitae to: Dr. Jen-Fu Chiu, Department of Biochemistry, University of Vermont College of Medicine, Burlington, Vt. 05405.

### RESEARCH TOXICOLOGIST

Position available for individual with experience in sister chromatid exchange analysis and exposure evaluation aspects of industrial hygiene. Responsibilities include management of a small laboratory and pursuit of research concerning the application of cytogenetic methods for biological monitoring of workers exposed to chemical agents in collaboration with the faculty investigator. Initial investigation involves use of sister chromatid exchange assays on peripheral blood samples of individuals exposed to formaldehyde. Work will also include further developmental aspects of SCE analysis such as investigation into potential differential response in lymphocyte subpopulations and the potential for adaptation to a micromethod. Doctoral degree and experience in SCE analysis and exposure evaluation aspects of industrial hygiene required. Ability to supervise postdoctoral work and laboratory operations highly desirable. Send résumé, references, and publications to: Dr. Robert C. Spear, School of Public Health, University of California, Berkeley, Calif. 94720, by 31 March 1982. Position will begin as soon as a suitable candidate is found.

## REGIONAL MEDICAL ASSOCIATE

**Pharmaceutical Marketing**  
Philadelphia, Atlanta, Minneapolis or Kansas City

Continued corporate expansion and recent internal promotions have created 3 unique growth opportunities for individuals to combine scientific expertise and marketing skills. Responsibilities are to establish effective relationships within key medical institutions, providing scientific liaison and indepth information essential to appropriate use of SK & F's products. Will also have training responsibility at the Representative, Medical Staff, and Pharmacy levels. Travel 30-40%.

Qualifications include PhD in Pharmacology, Biochemistry, Microbiology or other Life Sciences required. Must possess initiative, strong communication skills, and interest in Marketing.

In addition to an independent work environment where personal and professional growth are a way of life, we offer an outstanding Compensation/Benefits package and a relocation program geared to today's market. Please send resume; current earnings and location preference (Philadelphia, Atlanta, Minneapolis or Kansas City) to: Mr. Jim Beyea, **SMITHKLINE CORPORATION**, 1540 Spring Garden Street, P.O. Box 7929, Philadelphia, PA 19101. We are an equal opportunity employer, M/F/H/V

**SmithKline  
CORPORATION**

## Biochemist/ Immunologist

We paved the way for fast identification of endogenous substances, therapeutic and abused drugs with the EMIT® homogenous enzyme immunoassay system. Our accelerated growth and dedication to innovative approaches in medical diagnostics has made us a recognized leader in clinical chemistry.

As a Senior Research Biochemist you'll develop and produce monoclonal antibodies to a variety of antigens in our tissue culture laboratory. These responsibilities include large scale antibody purification and characterization plus development of new methodology and protocols. You'll also develop immunochemical and enzymatic assays and explore new assay techniques. Requires a PhD in Biochemistry, Cell Biology or Immunology, with two years' postdoctoral work desirable. Hands-on experience with hybridoma technology is a must.

Send your resume and references to Syva Company, Personnel Dept., P.O. Box 10058, Palo Alto, CA 94303. We are committed to an equal opportunity employment hiring policy m/f/h.



Syva / a Syntex company

**No place like it.**

## NATIONAL LIBRARY OF MEDICINE NATIONAL INSTITUTES OF HEALTH DEPARTMENT OF HEALTH AND HUMAN SERVICES

Closing Date: March 31, 1982

(All applications must be post-marked by the closing date.)

### DIRECTOR, LISTER HILL NATIONAL CENTER FOR BIOMEDICAL COMMUNICATIONS

The National Library of Medicine, National Institutes of Health, seeks a Director for the Lister Hill National Center for Biomedical Communications. The Director is responsible for planning, directing and coordinating a multi-million dollar intramural program involved in research of computer and educational technologies necessary to improve or develop biomedical communications. The program development efforts have national and international impact.

This is a Civil Service position in the Senior Executive Service (SES), with authorized salary from \$54,755 to \$61,300 per year depending on qualifications. Currently, the payable salary is limited to \$58,500.00. Special Bonus of up to \$10,000 may be allowed for Physicians. The SES individual selected, if not presently in the SES, must serve a one-year probationary period.

*Qualifications and Rating Process:* All candidates will be evaluated to determine whether they meet the mandatory professional/technical qualification requirements and the mandatory managerial/executive qualifications as outlined below.

*Mandatory Professional/Technical Qualifications:* Candidates must meet the minimum education and/or experience requirements specified in the Office of Personnel Management's Handbook X-118, Qualifications Standards for Positions in General Schedule. The position can be filled in an occupational specialty such as Medical Officer (GS-602), Health Science Administrator (GS-601), Computer Scientist (GS-1550), Electronic Engineer (GS-855), Biomedical Engineer (GS-858), Physical Scientist (GS-1301), etc. In addition, applicants must have demonstrated 1) research competence and productivity as recognized by peers in either the fields of health science, computer science, medical information science, engineering, or educational technology; as well as 2) professional experience in program planning, implementation, development and scientific administration of biomedical communications research programs. (Handbook X-118 is available in Federal Personnel Offices and Federal Job Information Centers).

*Mandatory Managerial/Executive Qualifications:* Demonstrated professional competence to assume leadership responsibilities in: assuring that national and agency goals and priorities are considered in carrying out the functions and responsibilities of the organization; establishing and maintaining relationships with key individuals and groups outside the organization; directing and guiding programs and projects, including long-term and short-term planning, and establishing objectives and priorities; establishing procedures for the development and defense of the organization's budget, and allocating fiscal and personnel resources to support program implementation; developing processes and overseeing activities to assure the fair and equitable employment of qualified persons, and implementing EEO objectives; and developing and implementing procedures for monitoring program performance, including periodic analysis and evaluation.

Candidates who meet the mandatory qualifications will be further evaluated by the Search Committee on the following factors: training and education, and honors and awards. Additional information may be obtained from: **Stella Graves, Personnel Officer, National Library of Medicine, (301) 496-4943.**

Interested applicants must submit a Personal Qualifications Statement (SF-171), Curriculum Vitae and Bibliography to the above individual at this address: **Building 38, Room M107, Bethesda, MD 20209.**

Applications of women and/or minority group members are especially solicited.

*The National Institutes of Health is an Equal Opportunity Employer*

## POSITIONS OPEN

**POSTDOCTORAL POSITION.** Opportunity exists to work on project concerned with the biochemical mechanisms of hormone (insulin) action to control phosphorylation and redox state. Applications are invited from qualified candidates with a Ph.D. or M.D. degree. Submit a résumé of research interests, curriculum vitae, and three letters of recommendation to: Dr. Joseph Lerner, Department of Pharmacology, Box 449, University of Virginia School of Medicine, Charlottesville, Virginia 22908. An Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL RESEARCH ASSOCIATE IN MOLECULAR VIROLOGY** available July 1982 for study of organization and expression of provirus in persistent retrovirus infection and/or retrovirus-transformed cells. Experience in restriction mapping, immunoprecipitation technology, and molecular cloning desirable. This is a 2-year appointment funded by an NIH training grant. Salary is commensurate with experience. To apply, send curriculum vitae and three letters of reference to: Dr. William P. Cheevers, Department of Veterinary Microbiology and Pathology, College of Veterinary Medicine, Washington State University, Pullman, Washington 99164. An Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL RESEARCH ASSOCIATE** (grant), 3 years. Research on dynamics of neurofilament proteins. Background in protein biosynthesis and/or cytoskeletal proteins. Salary depends upon qualifications. Send résumé to: Personnel, Position Number 271, New York State Institute for Basic Research, 1050 Forest Hill Road, Staten Island, N.Y. 10314. Affirmative Action/Equal Opportunity Employer, M/F/H.

**TWO POSTDOCTORAL RESEARCH ASSOCIATE** openings starting in March. Seek candidates with backgrounds in biochemistry, plant physiology, cell biology, biophysics, molecular biology, genetics, or related fields. Must have emphasis in either: (i) plant protoplast production, regeneration, or fusion, or (ii) liposomes. Salary: \$15,000. Apply by 5 March (or until suitable candidates found thereafter) to: Dr. David W. Galbraith, Project Director, 13 Manter Hall of Life Sciences, University of Nebraska-Lincoln, Lincoln, Nebraska 68588-0118. Telephone: 402-472-2362. Affirmative Action/Equal Opportunity Employer.

### POSTDOCTORAL RESEARCH FELLOW REPRODUCTIVE ENDOCRINOLOGY

Required immediately: a recent Ph.D. to work on biological and immunological studies of equine chorionic gonadotropin. Experience in immunoassay, antibody production, and cell culture useful but not essential. Three-year tenure possible. Salary at MRC rates. Contact: Dr. B. D. Murphy, Department of Biology, University of Saskatchewan, Saskatoon, Canada S7N 0W0. Telephone: 306-343-2705.

### POSTDOCTORAL RESEARCH POSITION

Available immediately for M.D./Ph.D. investigating behavioral and metabolic aspects of food and water intake regulation in diabetes and obesity in humans and animal systems. Strong interest and/or background in intermediary metabolism, physiologic psychology, neuropharmacology, and/or neuroendocrinology is desirable. Send curriculum vitae and references to: Robert G. Campbell, M.D., University of Rochester School of Medicine, Monroe Community Hospital, Rochester, New York 14603. Telephone: 716-473-4080, extension 368.

**POSTDOCTORAL RESEARCH SPECIALIST.** Available immediately to study regional O<sub>2</sub> supply and consumption in normal and ischemic areas of heart. Facility with animal surgery and biomedical instrumentation required. Send curriculum vitae and names of three references to: Personnel Department (Dr. Harvey R. Weiss), UNIVERSITY OF MEDICINE AND DENTISTRY OF NEW JERSEY-Rutgers Medical School, P.O. Box 101, Piscataway, New Jersey 08854. An Equal Opportunity/Affirmative Action Employer, M/F.

**RESEARCH ASSOCIATE** position in toxicology available for candidate with postdoctoral experience (2 to 4 years) in the neurotoxicity, metabolism, and mutagenicity of organophosphorus compounds. Experience in HPLC and GLC of pesticides and natural products preferred. Salary: \$14,000 to \$16,000 plus fringe benefits. Send curriculum vitae and three letters of recommendation to: Dr. M. B. Abou-Donia, Department of Pharmacology, Duke University Medical Center, Durham, N.C. 27710. Equal Opportunity/Affirmative Action Employer.

## POSITIONS OPEN

**RESEARCH ASSISTANT PROFESSOR** position available 1 December 1982 for individual with Ph.D. and two or more years of postdoctoral training. Experience needed in assessing biochemical responses (cyclic nucleotides, protein phosphorylation) of isolated smooth muscles. Send curriculum vitae to: James T. Stull, Ph.D., Department of Pharmacology, University of Texas Health Science Center at Dallas, 5323 Harry Hines Boulevard, Dallas, Texas 75235. An Equal Opportunity Employer.

### RESEARCH ASSOCIATE IN HUMAN GENETICS

Assist in development and administration of research in genetic epidemiology and behavior genetics. Participation in genetic counseling may be required on occasion. Ph.D. in human genetics (or related field) plus 1 to 2 years of relevant postdoctoral experience. Probationary appointment leading to possible continuing appointment on academic professional staff. Salary range: \$19,000 to \$25,000 per year. To assure consideration, send curriculum vitae and names of three references by 5 April 1982 to: V. Elving Anderson, Dight Institute for Human Genetics, University of Minnesota, 400 Church Street, SE, Minneapolis, Minnesota 55455. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.

**RESEARCH ASSOCIATE** position available for work on the interactions of heavy metals with the cell nucleus and its components. Salary negotiable depending on experience. Contact: Dr. Lubomir S. Hnilica, Department of Biochemistry, Vanderbilt University School of Medicine, Nashville, Tennessee 37232.

Vanderbilt University is an Equal Opportunity/Affirmative Action Employer.

The Agricultural Research Service (ARS) of U.S. Department of Agriculture (USDA) has an opening for a **RESEARCH CHEMIST** with knowledge of biochemical mechanisms and theories in mammals and insects. The position is located at the Veterinary, Toxicology and Entomology Laboratory, College Station, Texas. The incumbent must be thoroughly familiar with peptide and protein sequencing techniques, both manual and automated, including enzymatic and chemical cleavage, radioisotope tagging, and mass spectroscopy. Since insect preparations often yield minute quantities of neuropeptides, the incumbent must be willing to develop microsequencing procedures as the need arises. This is a temporary research associate position not to exceed 1 year and will be filled at the GS-11 (\$23,566 per annum) or GS-12 (\$28,245 per annum) level. Submit Form SF-171 and transcript to: Dr. G. Mark Holman, P.O. Drawer GE, College Station, Texas 77841. You will then be furnished with additional application requirements. Deadline for applications: 5 March 1982. ARS-USDA is an Equal Opportunity Employer.

### RESEARCH NEUROSCIENTIST

A position is available at the assistant or associate professor level for an independent investigator. A neurochemical research program in the area of aging, at development or the peripheral nervous system is preferred. Investigations utilizing tissue culture or immunologic techniques are of particular interest. The successful candidate will work in a multidisciplinary program emphasizing molecular and cellular approaches. The applicant should be interested in teaching and participating in pre- and postdoctoral neuroscience training programs which are now being organized. Candidates should send curriculum vitae, bibliography, and a statement of research interests to: Barbara Talamo, Ph.D., Neuroscience Laboratories, Department of Neurology, Tufts-New England Medical Center, 136 Harrison Avenue, Boston, Massachusetts 02111. Telephone: 617-956-7640. An Equal Opportunity/Affirmative Action Employer.

### RESEARCH POSITION

**RESEARCH POSITION**, at university hospital, to study cell-mediated immunity in human cancer. Doctorate required. Candidates must have experience in immunological and cell culture techniques, background in tumor immunology, and personality suitable for some patient contact. Excellent salary and benefits. Please send résumé to: Herta Tegtmeyer, Immunochimistry Research, Evanston Hospital, 2650 Ridge Avenue, Evanston, Ill. 60201.

## POSITIONS OPEN

**RESEARCH POSITION** in university anesthesia department. The position carries assistant or associate professor rank. The candidate should have an established background in pharmacology related to anesthesia or pain and should have ongoing research program and be able to aid clinical researchers in their field. Joint appointment with basic science department possible. Inquiries should be sent to: K. F. Schmidt, M.D., Department of Anesthesia, Tufts-New England Medical Center, 171 Harrison Avenue, Boston, Mass. 02111. The institution is an Equal Opportunity/Affirmative Action Employer.

The Long Island Research Institute (LIRI), a facility of the New York State Office of Mental Health which is colocated with the Department of Psychiatry and Behavioral Science, School of Medicine, of the State University of New York (SUNY) at Stony Brook, is seeking **TWO RESEARCH PSYCHIATRISTS**. One appointee is to serve as the director of the Division of Child Mental Health; the other is to pursue clinical research on depression or schizophrenia. Biologically oriented researchers are preferred. The institute employs over 60 scientists and staff including psychiatrists, psychologists, sociologists, neuroscientists, and chemists engaged in research on schizophrenia, child mental health, epidemiology of mental illness, gender development and sexual dysfunction, psychopharmacology, psychoneuroendocrinology, sleep disorders, and behavioral medicine. The institute is located in a recently opened university medical center. The laboratories are well equipped and the setting is conducive to research. Applicants should send curriculum vitae and statement of research interests to: R. E. Whalen, Scientific Director, LIRI, Health Sciences Center 10T, SUNY, Stony Brook, N.Y. 11794. LIRI is an Equal Opportunity/Affirmative Action Employer.

### RESEARCH SCIENTIST MARINE CHEMISTRY

The Port Aransas Marine Laboratory, Marine Science Institute of the University of Texas at Austin, is seeking a qualified Ph.D. with several years of experience for a research scientist position. This individual will be expected to initiate an independent research program in one or more of the following areas: trace metal geochemistry, biological cycling and transfer of nutrients, and nuclear geochemistry (radioisotope). Cooperative research with other staff is encouraged. This is a permanent, university-funded position. Send curriculum vitae, a statement of research interests, and the names of four references to:

Dr. Patrick L. Parker  
Port Aransas Marine Laboratory  
P.O. Box 1267  
Port Aransas, Texas 78373

An Equal Opportunity/Affirmative Action Employer

### SCIENTIFIC AND TECHNICAL PUBLISHING POSITION IN JAPAN

Elsevier Science Publishers, the largest international group of scientific publishers, seeks a person to assist in the development of its program in Japan.

**REQUIREMENTS:** Fluent Japanese; detailed knowledge of the Japanese scientific and technical communities; advanced degree (Ph.D. most desirable); specialization in the life sciences or engineering or information science/information technology preferable; and experience with scientific publishing an advantage.

**LOCATION:** Tokyo, after a period of training in New York and Amsterdam. Regular travel to the United States and Europe will be required.

**RESPONSIBILITIES:** Support editorial programs of European and U.S. offices; market research; and involvement in planning and development of long-term strategies and new product lines, including databases and online publishing.

Send résumé and salary requirements to: Lynne Brody, Personnel Director, Elsevier Science Publishing Co., Inc., 52 Vanderbilt Avenue, New York, N.Y. 10017.

**STAFF POSITION.** We are seeking an outstanding research investigator whose program involves the **ROLE OF MEMBRANES IN DIFFERENTIATION**. The department's research efforts are focused around membranes and membrane-related phenomenon. Salary is competitive. Send curriculum vitae, bibliography, references, and a brief outline of research program to: Dr. Martin Morrison, Department of Biochemistry, St. Jude Children's Research Hospital, P.O. Box 318, Memphis, Tennessee 38101.

Equal Opportunity Employer

**KING FAISAL UNIVERSITY  
COLLEGE OF MEDICINE  
DAMMAM, SAUDI ARABIA  
Faculty Positions Open  
1982-1983**

King Faisal University College of Medicine, now in its eighth year, invites applications from qualified men and women for the 1982-1983 academic year in:

Chemistry	Pathology
Biology	Epidemiology
Physics	Microbiology
Biochemistry	Parasitology
Anatomy	Pharmacology
Physiology	Community Medicine

Doctorate or equivalent degree required. Language of instruction is English. Interviews to be held in London and Houston during spring 1982.

Salaries are highly competitive and negotiable; comparable to other Saudi universities.

Benefits include free furnished housing, educational allowances, air tickets to and from Saudi Arabia once each year for a family of four, 60-day paid vacation, and liberal overweight allowance. No Saudi income tax.

Send curriculum vitae with current telephone number and the names and addresses of three references to:

Dr. Tawfik Tamimi  
Dean, College of Medicine  
King Faisal University Office  
Suite 540  
2425 West Loop South  
Houston, Texas 77027

OR

c/o Saudi Arabian Educational Office  
29 Belgrave Square  
London, S.W. IX 8QB, England

## Q.C. Procedure Validation Scientist

Genentech, Inc., a recognized leader in recombinant DNA research, is presently seeking an individual to assume challenging responsibilities in a stimulating, multidisciplinary environment.

Our Quality Control Dept. is seeking someone to develop, modify and validate test procedures used for inprocess and final product acceptance of drug products. In addition, will perform specialized analyses and tests, summarizing data for final review, approval and presentation in IND and NDA submissions.

Requires a Master's or PhD in Analytical Chemistry or Biochemistry with an emphasis on methods development and formulation in drug compounds. Candidates must have 3-4 years directly related experience in an analytical development lab in a pharmaceutical environment. Should also be familiar with modern biochemical techniques such as SDS polyacrylamide gel electrophoresis, HPLC, RIA, amino acid analysis, Edman degradation, and bioassays.

We offer excellent salaries, comprehensive benefits, and a liberal relocation program. We invite qualified individuals to forward their resumes or curriculum vitae, along with the names of three references to **Human Resources**. Please refer to **Position #11-115**.

Genentech, Inc.  
Genentech, Inc.  
Genentech, Inc.  
**Genentech, Inc.**  
Genentech, Inc.

460 Point San Bruno Boulevard  
South San Francisco, CA 94080

We are an equal opportunity employer m/f

## HOFFMANN-LA ROCHE

### Psychopharmacologist

BS or MS

Hoffmann-La Roche, one of the world's leaders in the pharmaceutical industry, has an opportunity for an individual with both laboratory experience and computer expertise.

**Responsibilities:** run, maintain, and report on animal experiments in a computer-operated CNS/behavioral pharmacology laboratory; use and develop computing equipment.

**Qualifications:** BS or MS and full-time research experience in biology, psychology, or pharmacology. Experience operating and programming computers is essential.

Roche offers outstanding fringe benefits and an environment that encourages professional growth. Only responses including present salary will be acknowledged. Please send resume to Box Z, Employment Department.



**HOFFMANN-  
LA ROCHE INC.**  
Nutley, NJ 07110

*Products that matter  
from people who care*

An Equal Opportunity Employer

### AAAS Memberships and Subscriptions

• Whenever you write us about your membership or subscription, please attach a **Science** address label to ensure prompt service.

• **Mail to:** Membership and Subscription Records, AAAS, 1515 Massachusetts Ave., NW, Washington, D.C. 20005.

☐ **Change of Address:** Please provide 6 weeks' notice. Paste an address label from a recent issue in the space provided. Print new address below.

☐ **Query:** If you have a question, place your address label here and attach this form to your letter.

• **To join or subscribe:** Mail this form with your payment, mark the appropriate boxes, and print your name and address in the space below. (For renewals, attach label.)

☐ **Membership rates** (individual only)  
☐ \$43 USA ☐ \$67 Canada, PUAS ☐ \$70 Foreign  
☐ \$98 air-surface delivery via Holland

☐ **Subscriber rates**  
☐ \$80 USA ☐ \$104 Canada, PUAS ☐ \$107 Foreign  
☐ \$135 air-surface delivery via Holland

**ATTACH  
LABEL  
HERE**

☐ Payment enclosed ☐ Bill me later

Name  Please print

Address

City  State  Zip

**MX02**



## POSITIONS OPEN

### Simon Fraser University Burnaby, British Columbia, Canada DEPARTMENT OF BIOLOGICAL SCIENCES VERTEBRATE BIOLOGIST

Applications are invited for a tenure-track position as assistant professor in the area of vertebrate biology. The successful applicant will teach undergraduate courses in vertebrate biology and wildlife biology as well as a graduate course in vertebrate pests. Candidates must have a Ph.D. degree and would be expected to develop an active research program in an area of the biology of vertebrates appropriate to a Life Sciences Department. In addition, the successful applicant would participate in the department's Master of Pest Management Program. Preference will be given to candidates eligible for employment in Canada at the time of application.

The position is available from 1 September 1982. The current salary base for the assistant professor rank is \$25,056.

Applications should include curriculum vitae, a brief statement of research interests and objectives, and selected reprints of pertinent published research. Applicants should request confidential assessments of their research and teaching ability from three referees, to be forwarded to:

Dr. K. K. Nair, Chairman  
Department of Biological Sciences  
Simon Fraser University

Burnaby, British Columbia, Canada V5A 1S6

Deadline for receipt of applications is 30 April 1982 or until the position is filled.

**ZOOLOGIST.** Continuing appointment in the Department of Biology, The Pennsylvania State University, New Kensington Campus, New Kensington, Pa. Position available September 1982. Preferred areas: anatomy, physiology, or ecology. Duties include teaching general biology, general zoology, and introductory courses in one or more of the above subject areas. Continuing scholarly activity, including research and publication, will be required. Candidates must have Ph.D. degree. Salary commensurate with qualifications. Application deadline: 15 March 1982. Send curriculum vitae, transcripts, and three letters of reference to: Dr. William H. Neff, Box G, 208 Mueller Building, University Park, Pa. 16802. The Pennsylvania State University is an Affirmative Action/Equal Opportunity Employer.

**ZOOLOGIST.** Continuing appointment in the Department of Biology, The Pennsylvania State University, Worthington Scranton Campus, Scranton, Pa. Position available September 1982. Duties include teaching general biology, general zoology, and basic human anatomy and physiology for health-related majors. Microbiology background desirable. Continuing scholarly activity, including research and publication, will be required. Candidate must have Ph.D. degree. Salary commensurate with qualifications. Application deadline: 15 March 1982. Send curriculum vitae, transcripts, and three letters of reference to: Dr. William H. Neff, Box G, 208 Mueller Building, University Park, Pa. 16802. The Pennsylvania State University is an Affirmative Action/Equal Opportunity Employer.

## FELLOWSHIPS

**POSTDOCTORAL FELLOWSHIPS.** Two-year postdoctoral fellowships for research training related to the visual system in developmental biology of basic mechanisms in normal and abnormal retinal development and steroid pharmacology of control of ocular pressure. For U.S. citizens or permanent residents with Ph.D. or M.D. Supported by NIH training grant. Send curriculum vitae to: Bernard Schwartz, M.D., Ph.D., Chairman and Professor, Department of Ophthalmology, Tufts-New England Medical Center, 171 Harrison Avenue, Boston, Mass. 02111. An Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL FELLOWSHIPS AND RESEARCH ASSOCIATESHIP** are available immediately at the University of Toronto in the field of protein biosynthesis. Previous experience in molecular genetics, cloning, and sequencing techniques is preferred. A Ph.D. and three letters of reference are required. Write:

Professor M. C. Ganoza  
Banting and Best Department of Medical Research  
112 College Street  
Toronto, Ontario, Canada M5G 1L6

## FELLOWSHIPS

The National Research Council of the National Academy of Sciences offers a small number of **RESIDENT FELLOWSHIPS** for work on science, technology, and public policy. Scientists and engineers who have received their professional degrees fewer than 10 years before the date of the application are eligible for these 1-year fellowships. The next deadline for completion of the application process (which requires about 1 month) is 1 March 1982.

Inquiries should be addressed to:

National Research Council Fellowship Program  
Executive Office  
National Academy of Sciences  
2101 Constitution Avenue, NW  
Washington, D.C. 20418

**TWO POSTDOCTORAL TRAINING FELLOWSHIPS** in cellular aging are immediately available at the Biochemistry Department, Albert Einstein College of Medicine, for a 2-year period starting at \$13,380 per annum, depending upon experience. Research areas include chemical and biological properties of the extracellular matrix of cultured aortic smooth muscle cells and biogenesis, packaging, and processing of lysosomal enzymes as a function of cellular senescence in culture. Please send curriculum vitae and names of two references to: Dr. Sam Seifter, Department of Biochemistry, ALBERT EINSTEIN COLLEGE OF MEDICINE, 1300 Morris Park Avenue, Bronx, New York 10461. An Equal Opportunity Employer.

### IMPERIAL CANCER RESEARCH FUND Research Fellowship

Applications are invited for a 3-year postdoctoral fellowship to work on cellular and molecular aspects of the growth-modulatory effect of interferon in cells in culture. The position would be jointly held in two laboratories which cooperate in this project. Interferon receptors and opposite effects of interferon and growth-promoting factors on early, intermediate, and late biochemical events of the proliferative response would be some of the areas of interest.

Salary range £8787 to £10,837 (inclusive of London weighting), with entry according to qualifications and experience. Applications with curriculum vitae and names of two referees should be sent to: Secretary, Imperial Cancer Research Fund, Lincoln's Inn Fields, London WC2, England, quoting reference number 21/82.

**POSTGRADUATE FELLOWSHIP** for Ph.D. in immunology, biochemistry, or cell biology to work in project studying the synthetic abilities of leukocytes. Experimental methods include: tissue cultures, colony forming unit assay, gel electrophoresis, isoelectric focusing, analysis of glycoprotein and carbohydrate content and structure, SDS acrylamide gels, N terminal and amino acid analysis, and production of monoclonal antibodies. Experience in some of these methods desirable. Salary commensurate with background, up to \$20,000. Send applications with curriculum vitae and three references to: Dr. C. J. Rosenthal, Department of Medicine, Downstate Medical Center, Box 20, 450 Clarkson Avenue, Brooklyn, N.Y. 11203. An Equal Opportunity Employer.

## DOCTORAL PROGRAM

### UNIQUE DOCTORAL PROGRAM IN BIOLOGY OR SCIENCE EDUCATION

Looking for a unique doctoral program in biology or science education designed to meet individual needs, and to foster discipline competencies and teaching skills? Look into the programs offered at Ball State University. Fellowships available for 1982-1983 academic year. Contact: Dr. Thomas Mertens, Department of Biology, Ball State University, Muncie, Ind. 47306.

## TRAINEESHIPS

**TRAINEESHIP, CANCER RESEARCH.** University of Miami Comprehensive Cancer Center. Opportunities available immediately for Ph.D.'s or M.D.'s to obtain 2 years of research in broad range of disciplines related to cancer. Competitive stipends. U.S. citizens and permanent residents. Reply by letter with résumé to: Dr. Marylou Ingram, Institute for Cell Analysis, UMHC/NCCH D-1, 1475 Northwest 12 Avenue, Miami, Fla. 33101.

## GRADUATE STUDY

### OPPORTUNITY FOR GRADUATE STUDIES

The Biomedical Graduate Program, School of Medicine, University of Pittsburgh, offers graduate training in anatomy and cell biology, biochemistry, microbiology, pathology, pharmacology, and physiology. Institutional and cancer research training stipends are available for qualified applicants to cover tuition and living expenses.

For application forms, contact: Dr. Peter Ove, Director, Graduate Division of Biomedical Sciences, School of Medicine, University of Pittsburgh, Pittsburgh, Pennsylvania 15261.

An Equal Opportunity/Affirmative Action Institution

## MEETING

**NATO ADVANCED STUDY INSTITUTE: PHOTOPHYSICS AND PHOTOCHEMISTRY IN THE VACUUM ULTRAVIOLET**, 15 to 28 August 1982, Lake Geneva, Wisconsin. Director: Dr. S. P. McGlynn, Louisiana State University. Associate directors: Dr. G. L. Findley, Louisiana State University, and Dr. R. H. Huebner, Argonne National Laboratory. For application materials, write: Miriam L. Holden, Office of Public Affairs, Argonne National Laboratory, Building 362 H309, 9700 South Cass Avenue, Argonne, Ill. 60439. Application deadline: 15 May 1982.

## MARKETPLACE

### Easi Litter



Easi Litter—same composition as wood but without Tars or Resin. Easi Litter, Chlorophyll—positive odor control.

1. Controls odor and moisture—one change a week is all that is necessary.

Westminster Scientific, Inc., P.O. Box 109,  
Westminster, Maryland 21157-0109 301-876-1613

Circle No. 374 on Readers' Service Card

**H/I ROTOSCRIBER**  
Mini-power tool for effortless micromilling and engraving - Interchangeable Diamond Tip  
No Vibration! Smooth! Quiet!

H/I HACKER INSTRUMENTS INC.  
Box 657, Fairfield, New Jersey 07006 (201) 226-8450

Circle No. 342 on Readers' Service Card

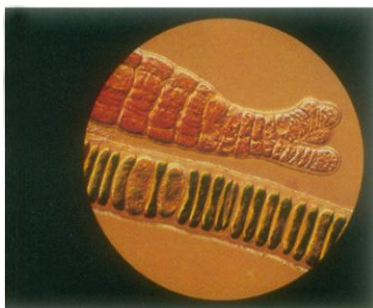
**WIRE**  
A-M SYSTEMS, INC. offers a wide selection of micro-miniature precision wires. These precious metal and specialty wires are available both uncoated or Teflon-coated. They are manufactured of the highest purity metals and offered at the most reasonable prices for medical instrumentation and sensors. Write for your free catalog today!

- PLATINUM • PLATINUM-IRIDIUM
- SILVER • STAINLESS-STEEL
- TUNGSTEN • GOLD

**A-M SYSTEMS, INC.**  
917-134th ST. S.W. Bldg. 4  
Everett, WA 98204 1-800-426-1306

Circle No. 262 on Readers' Service Card

# NIKON VISIONS



## NIKON PRESENTS THE UNDERGRADUATE MICROSCOPE WITH GRADUATE CREDENTIALS.

Photomicrograph of *Polysiphonia urceolata* and *Ulothrix fluca*. Nikon 40x objective with Hoffman Modulation Contrast.

### INSTRUMENTATION

Nikon SC microscope.

### SIGNIFICANCE

Nikon has designed a durable, economically priced microscope that provides image quality superior to competitively priced instruments.

### SPECIFICS

Nikon moves to the head of the class with optics that provide clear and vivid images. They're easy to interpret, even for a beginner. A special optical element, built into the sturdy stand, achieves an amazingly flat viewing field. Contrast and resolution found only in more expensive instruments are an added bonus, as is the tamper proof design. Components may be removed only with a special tool. Long life of the high intensity, continuously adjustable illumination system is prolonged by a switch that turns it on only at the lowest light level.

The precision focusing mechanism can be adjusted from either side and is made to withstand daily use without maintenance. Hoffman Modulation Contrast and darkfield accessories are available to extend versatility. The instrument is U.L. Listed and backed by a five year full warranty.

Extend your vision with the SC microscope. Write: Nikon Visions, Nikon Incorporated, Instrument Division, 623 Stewart Avenue, Garden City, N.Y. 11530 (516) 222-0200.

**Nikon**  
*Extending Man's Vision*

Circle No. 19 on Readers' Service Card







## Kodak announces a new world of low-cost inorganic chemicals. (And simple arithmetic.)

First, we're offering 250 of the most called-for inorganic chemicals—with the same quality, purity, and consistency of our organic chemicals. Second, if you're comparing discounts, figure out the real bottom-line price difference. And third, since we package by metric measure, Kodak's 500-gram container is more than the typical one-pound (450-gram) unit. Add it up. See your dealer, or write for a free copy of our new "Tools for Analytical Chemists," Catalog JJ-2. Let it guide your imagination—and arithmetic.



### The creative source.

The ready source—dealers handling KODAK Laboratory Chemicals: American Scientific & Chemical; American Scientific Products; Bioclinical Laboratories NJ; BCL/New York; Brand-Nu Laboratories, Inc.; Bryant Laboratory, Inc.; CAMX Scientific; Fisher Scientific; Mays Chemical; Midland Scientific, Inc.; North-Strong Division; Preiser Scientific; Sargent-Welch Scientific; Scientific & Industrial Sales & Service, Inc.; Specialty Chemicals, Inc.; VWR Scientific Inc.; Ward's Natural Science Establishment, Inc. © Eastman Kodak Company, 1981. Kodak Laboratory and Specialty Chemicals, Rochester, NY 14650

Eastman Kodak Company, Kodak Laboratory & Specialty Chemicals  
Dept. 412-L, Rochester, NY 14650.

Please send me a free copy of "Tools for Analytical Chemists," Catalog JJ-2.

NAME \_\_\_\_\_ TITLE \_\_\_\_\_

FIRM \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

