

It is perhaps salutary that Terrell also uses non-rigorous approaches to arrive at conclusions. "Common sense and statistical reasoning alike tell us that too many long-distance migrations would have to be *imagined* to make such a hypothesis about the past seem credible" (p. 156; emphasis mine).

Despite its broad range, the book is in parts unnecessarily tedious. The best example is the first ten pages of the chapter "Structure and function," following which we are told, "Thus far, however, we have been talking in generalities" (p. 222). And among the omissions is any detailed discussion of the effects of natural disasters on particular Pacific populations or of the effects of contact with Europeans during the nearly five centuries that have elapsed since the first contacts were made. Of particular importance was the depopulation of many islands during the 19th century by disease and slavery, well documented recently by Maude (*Slavers in Paradise*, Australian National University Press, 1981).

This book is attractively produced, as we have come to expect from Cambridge University Press.

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## Books Received

**The Acquisition of Gender.** A Study of English and German. Anne E. Mills. Springer-Verlag, New York, 1986. x, 173 pp., illus. \$54.50. Springer Series in Language and Communication, vol. 20.

**AIDS.** Modern Concepts and Therapeutic Challenges. Samuel Broder, Ed. Dekker, New York, 1987. xiv, 369 pp., illus. \$69.75.

**AIDS (Acquired Immune Deficiency Syndrome.)** David A. Tyckoson. 2nd ed. Oryx, Phoenix, AZ, 1986. iv, 91 pp. Paper, \$15. Oryx Science Bibliographies, vol. 7.

**Altered Harvest.** Agriculture, Genetics, and the Fate of the World's Food Supply. Jack Doyle. Penguin, New York, 1986. xxii, 502 pp. Paper, \$8.95. Reprint, 1985 edition.

**Cardiovascular Drugs.** James A. Bristol, Ed. Wiley-Interscience, New York, 1986. xvi, 448 pp., illus. \$75. Chemistry and Pharmacology of Drugs, vol. 7.

**Centenary Book of the University of Sydney Faculty of Medicine.** John Atherton Young, Ann Jervie Sefton, and Nina Webb, Eds. Published for the University of Sydney Faculty of Medicine by Sydney University Press, Sydney, 1984 (U.S. distributor, ISBS, Portland, OR). xx, 548 pp., illus. \$55.

**Cerebellum and Rhythmic Movements.** Yu. I. Arshavsky, I. M. Gelfand, and G. N. Orlovsky. Springer-Verlag, New York, 1986. xii, 166 pp., illus. \$88. Studies of Brain Function, vol. 13.

**The Changing Environment.** James W. Moore. Springer-Verlag, New York, 1986. x, 239 pp., illus. \$39. Springer Series on Environmental Management.

**Chemical and Biological Warfare Developments: 1985.** J. P. Perry Robinson. Oxford University Press, New York, 1986. vi, 110 pp. Paper, \$24.95. Stockholm International Peace Research Institute.

**Chemical Reaction and Reactor Engineering.** James J. Carberry and Arvind Varma, Eds. Dekker, New York, 1987. xii, 1069 pp., illus. \$150. Chemical Industries, vol. 26.

**Chemistry and Physics of Solid Surfaces VI.** R.

Vanselow and R. Howe, Eds. Springer-Verlag, New York, 1986. xviii, 667 pp., illus. \$83. Springer Series in Surface Sciences, vol. 5. Based on an institute, Milwaukee, WI, July 1985.

**Chemistry by Computer.** An Overview of the Applications of Computers in Chemistry. Stephen Wilson. Plenum, New York, 1986. xii, 233 pp., illus. \$37.50.

**Child Rearing in the Home and School.** Robert J. Griffore and Robert P. Boger, Eds. Plenum, New York, 1986. viii, 235 pp. \$49.50.

**Christiaan Huygens' The Pendulum Clock or Geometrical Demonstrations Concerning the Motion of Pendula as Applied to Clocks.** Iowa State University Press, Ames, 1986. xxxii, 182 pp., illus. \$38.95. Iowa State University Press Series in the History of Technology and Science. Translated, with additions, from the Latin by Richard J. Blackwell.

**Circannual Rhythms.** Endogenous Annual Clocks in the Organization of Seasonal Processes. Eberhard Gwinner. Springer-Verlag, New York, 1986. xii, 154 pp., illus. \$71. Zoophysiology, vol. 18.

**Coal Geophysics.** David J. Buchanan and Lindsey J. Jackson, Eds. Society of Exploration Geophysicists, Tulsa, OK, 1986. 466 pp., illus. Paper, \$47. Geophysics Reprint Series, no. 6.

**Cognition and Affect.** A Developmental Psychology of the Individual. Laurence R. Simon. Prometheus, Buffalo, NY, 1986. 280 pp., illus. \$19.95. Psychology Series.

**Comets Halley and Giacobini-Zinner.** E. Grün, Ed. Published for the Committee on Space Research by Pergamon, New York, 1986. viii, 344 pp., illus. \$52. Advances in Space Research, vol. 5, no. 12. From a symposium, Toulouse, France, June 1986.

**The Common Market and How It Works.** Anthony J. C. Kerr. 3rd ed. Pergamon, New York, 1986. xviii, 296 pp., illus., + plates and pullout charts. \$23; paper, \$15. Pergamon Oxford Geographies.

**Comparative Neurobiology of the Basal Ganglia.** André Parent. Wiley-Interscience, New York, 1986. xiv, 335 pp., illus. \$59.95. Wiley Series in Neurobiology.

**Complexity, Managers, and Organizations.** Siegfried Streufert and Robert W. Sweczy. Academic Press, Orlando, FL, 1986. xii, 260 pp., illus. \$29.50. Organizational and Occupational Psychology.

**Drug Development.** From Laboratory to Clinic. Walter Sneider. Wiley, New York, 1986. viii, 115 pp., illus. Paper, \$17.95. A Wiley Medical Publication.

**Dynamical Systems: A Renewal of Mechanism.** Centennial of George David Birkhoff. S. Diner, D. Fargue, and G. Lochak, Eds. World Scientific, Philadelphia, 1986. x, 284 pp., illus. \$40. Fondation Louis de Broglie. Based on a meeting, Peyresq, France, Aug. 1984.

**Dynamics of Cholinergic Function.** Israel Hanin, Ed. Plenum, New York, 1986. xviii, 1273 pp., illus. \$145. Advances in Behavioral Biology, vol. 30. Based on a conference, Oglebay Park, WV, Oct. 1983.

**Early Astronomy from Babylonia to Copernicus.** W. M. O'Neil. Sydney University Press, Sydney, 1986 (U.S. distributor, ISBS, Portland, OR). xiv, 214 pp., illus. \$27.50.

**Ecology of Biological Invasions of North America and Hawaii.** Harold A. Mooney and James A. Drake, Eds. Springer-Verlag, New York, 1986. xviii, 321 pp., illus. \$59. Ecological Studies, vol. 58. Based on a symposium, Asilomar, CA, Oct. 1984.

**Ecology of Protozoa.** The Biology of Free-living Phagotrophic Protists. Tom Fenchel. Science Tech., Madison, WI, and Springer-Verlag, New York, 1987. x, 197 pp., illus. \$39. Brock/Springer Series in Contemporary Bioscience.

**The Effects of Radiation on Electronic Systems.** George C. Messenger and Milton S. Ash. Van Nostrand Reinhold, New York, 1986. xviii, 587 pp., illus. \$54.95.

**'86 Massive Neutrinos in Astrophysics and in Particle Physics.** O. Fackler and J. Trần Thanh Vân, Eds. Editions Frontières, Gif-sur-Yvette, France, 1986. xviii, 704 pp., illus. \$69. Moriond Workshop 6 (Tignes, Savoie, France, Jan. 1986).

**Electronic Databases in Japan.** An Information Resource To Be Reached On-Line. Jon Sigurdson and Roger Greatrex. Research Policy Institute, University of Lund, Lund, Sweden, 1986. viii, 143 pp., illus. Paper, SKr 100.

**Governing Science and Technology in a Democracy.** William A. Blanpied et al. Malcolm L. Goggins, Ed. University of Tennessee Press, Knoxville, 1986. xviii, 315 pp. \$34.95.

**The Great Dying.** Kenneth J. Hsü. Harcourt Brace Jovanovich, San Diego, CA, 1986. xii, 292 pp. \$17.95.

**The Green Machines.** Nigel Calder. Putnam's, New York, 1986. 205 pp. \$16.95.

**Guide to Fossil Man.** Michael H. Day. 4th ed. University of Chicago Press, Chicago, 1986. xvi, 432 pp., illus. \$37.50.

**Handbook of Heterocyclic Chemistry.** Alan R. Katritzky et al. Pergamon, New York, 1986. xxii, 542 pp., illus. \$88; paper, \$34.95. Reprint, 1985 edition.

**Handbook of Motivation and Cognition.** Foundations of Social Behavior. Richard M. Sorrentino and E. Tory Higgins, Eds. Guilford, New York, 1986. xii, 610 pp., illus. \$45.

**Handbook of Perception and Human Performance.** Kenneth R. Boff, Lloyd Kaufman, and James P. Thomas, Eds. Wiley-Interscience, New York, 1986. Two volumes. Vol. 1, Sensory Processes and Perception. Various pagings, illus. \$95. Vol. 2, Cognitive Processes and Performance. Various pagings, illus. \$85.

**Health Conditions in the Americas, 1981-1984.** Pan American Health Organization, Washington, DC, 1986. Two volumes. Vol. 1, x, 416 pp., illus. Paper, \$8. Vol. 2, vi, 250 pp., illus. Paper, \$8. Scientific Publication no. 500.

**Health Planning and Social Change.** Leonard J. Duhl. Joanna Tamer, Ed. Human Sciences Press, New York, 1986. 320 pp. \$34.95.

**Introduction to Radiological Physics and Radiation Dosimetry.** Frank Herbert Attix. Wiley-Interscience, New York, 1986. xxiv, 607 pp., illus. \$54.95.

**Introduction to the Physics of Complex Systems.** The Mesoscopic Approach to Fluctuations. Non Linearity and Self-Organization. Roberto Serra et al. Pergamon, New York, 1986. xviii, 222 pp., illus. \$30; paper, \$14.95.

**Iron, Siderophores, and Plant Diseases.** T. R. Swinburne, Ed. Plenum, New York, 1986. x, 351 pp., illus. \$59.50. NATO Advanced Science Institutes Series A, vol. 117. From a workshop, Wye, Kent, U.K., July 1985.

**Jewish Values in Bioethics.** Levi Meier, Ed. Human Sciences Press, New York, 1986. 195 pp., illus. \$26.95.

**Josephson Effect.** Achievements and Trends. Antonio Barone, Ed. World Scientific, Singapore, 1986 (U.S. distributor, Taylor and Francis, Philadelphia). xii, 511 pp., illus. \$67. Advances in the Physics of Condensed Matter. Based on a workshop, Torino, Italy, Sept. 1985.

**Learning and Memory.** Mechanisms of Information Storage in the Nervous System. Hansjurgen Marthies, Ed. Pergamon, New York, 1986. xvi, 414 pp., illus. \$85. Advances in the Biosciences, vol. 59. From a symposium, Magdeburg, G.D.R., Oct. 1985.

**The Learning Society Revisited.** Torsten Husén. Pergamon, New York, 1986. viii, 262 pp., \$29.95; paper, \$14.95.

**Lipoprotein Deficiency Syndromes.** Aubie Angel and Jiri Frohlich, Eds. Plenum, New York, 1986. x, 303 pp., illus. \$49.50. Advances in Experimental Medicine and Biology, vol. 201. From a conference, Vancouver, Canada, May 1985.

**Magnetic Properties of Low-Dimensional Systems.** L. M. Falicov and J. L. Morán-López, Eds. Springer-Verlag, New York, 1986. x, 189 pp., illus. \$50. Springer Proceedings in Physics, vol. 14. From a workshop, Taxco, Mexico, Jan. 1986.

**Magnetotelluric Methods.** Keesa Vozoff, Ed. Society of Exploration Geophysicists, Tulsa, OK, 1986. x, 763 pp., illus. Paper, \$47. Geophysics Reprint Series, no. 5.

**The Manipulation of Air-Sensitive Compounds.** D. F. Shriver and M. A. Drezdson. 2nd ed. Wiley-Interscience, New York, 1986. x, 326 pp., illus. \$44.95.

**Marine Gamefish of the Middle Atlantic.** David K. Bulloch. Illustrated by Maria Levine. American Littoral Society, Highlands, NJ, 1986. x, 83 pp. Paper, \$6. Special Publication, no. 13.

**Maritime Archaeology in Australia.** Graeme Henderson, University of Western Australia Press, Nedlands, 1986 (U.S. distributor, ISBS, Portland, OR). x, 201 pp., illus. \$40.

**Maritime Strategy, Geopolitics, and the Defense of the West.** Colin S. Gray. National Strategy Information Center, New York, 1986. x, 85 pp. Paper, \$8.95.

**Mass Spectrometry.** Applications in Science and Engineering. Frederick A. White and George M. Wood. Wiley-Interscience, New York, 1986. xxii, 773 pp., illus. \$72.50.

**Plant-Microbe Interactions.** Tsune Kosuge and Eugene W. Nester, Eds. Macmillan, New York, 1986. xiv, 448 pp., illus. \$40. Molecular and Genetic Perspectives, vol. 2.

**The Police.** Powers, Procedures and Proprieties. John Benyon and Colin Bourn, Eds. Pergamon, New York, 1986. xxiv, 334 pp., illus. \$30; paper, \$14.50. Based on three conferences, Leicester, U.K., 1985.

(Continued on page 1688)

## Products & Materials

### Graphics Software

The Draftsman is a software package for producing pie graphs, exploded pie graphs, stacked bar charts, cluster bar charts, scatter plots, line graphs, and simple illustrations. Each graph may be sized and moved, and several may be placed on the same screen. In the edit mode, the user may use a mouse to embellish graphs and draw organizational charts, flow charts, and other illustrations. In the slide-show mode, any sequence of screens may be displayed. An electronic bulletin board offers 24-hour free support to users. The Draftsman requires an IBM PC or fully compatible computer with at least 128 kilobytes of memory, at least one floppy disk drive, and a color monitor; for hard-copy, an HP 7470 plotter or Epson printer is recommended. Hire Education. Circle 533.

### Washer for Western Blot Testing

The Accutran Immuno-strip Washer is a hand-held, manually operated device that maximizes washing speed by allowing simultaneous delivery or aspiration into eight channels or wells while minimizing researcher contact with dangerous materials. It has been designed to speed washing, developing, and incubation steps in Western blot immunoassays that involve screening multiple samples of membrane-bound antigens. Two color-coded fingertip controls regulate solution delivery and aspiration. Delivery without suction is also possible. Schleicher & Schuell. Circle 534.

### Software Calculator

PHYSICALC is a software scientific calculator program that converts units of measurement. More than 140 standard units are built in, including metric, British, U.S. Customary, and apothecary. Logarithms, exponentials, and trigonometric functions are among the integral functions. Users may define additional units, constants, formulas, and functions. PHYSICALC checks that

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units entered by the user are compatible with the formula chosen. The program operates on IBM PC or compatible computers, Apple computers with SoftCard, and Osborne computers. micro ware. Circle 535.

### Radioisotope Detector

The 171 Radioisotope Detector provides quantitation of single- and dual-labeled compounds as they are eluted from a liquid chromatography column. It is cold room-compatible to protect labile compounds. It has settings for tritium, carbon-14, phosphorus-32, sulfur-35, and iodine-125; Auto-Isoset automates adjustment for any other chosen isotope. A cartridge-design flow cell allows quick volume changes and



easy decontamination. Self-adjusting circuitry optimizes counting conditions for packed cells or liquid cells. Other features include a four-line, 40-character, liquid crystal display, menu-driven programming, automatic fraction-collector control, luminescence correction, automatic background subtract, automatic start and stop, and user-accessed diagnostics. Beckman Instruments, Nuclear Systems Operations. Circle 525.

### Custom-Built Coldrooms

Bio-Cold Rooms, custom built to the user's requirements, are available as refrigerators or freezers. Ceilings, floor caps, and interior and exterior walls are constructed of embossed aluminum, and floors, of galvanized steel. Doors are self-closing with cam-lift hinges and interior safety releases. Exterior hardware is chrome-plated. Other features include automatic defrost, a dial showing both Fahrenheit and centigrade temperatures, and foamed-in-place urethane insulation. Kelvinator Scientific. Circle 547.

### Water Purification System

The RGW-5 Type I Reagent Grade Water System produces 18-megohm, bacteria-free reagent-grade water at 2 liter/min. The water is purified by disposable carbon, deionization resin, and 0.2  $\mu$ m final filtration cartridges. The final filter can be reused and autoclaved. An optional ultrafiltration accessory produces pyrogen-free water. Vanguard. Circle 540.

### Eigenvalue Software

EIGEN ANALYZER is a computer software package for calculating the real and complex eigenvalues of any real matrix. The matrix need not be symmetrical and is not restricted except that it cannot be poorly conditioned. Matrix elements and the resulting eigenvalues may be stored and recalled as ASCII files. Maximum matrix size is 40 by 40. The program includes a sensitivity analysis feature. Matrix elements may have a specified uncertainty. EIGEN ANALYZER uses Monte Carlo techniques to calculate mean values for the eigenvalues and the standard deviation of the variation in their real and imaginary parts. DYNACOMP. Circle 548.

### Media Preparation System

The Microbiological Media Preparation System consists of three modules. The user loads the first module with dehydrated medium and water. The module then prepares and sterilizes the medium. The second module dispenses the medium into Petri plates as small as 35 mm or as large as 140 mm. The third module stacks up to 240 Petri plates. Jouan. Circle 552.

### Literature

*The SLM8000C* is a ten-page brochure about a photon-counting spectrofluorometer. SLM Instruments. Circle 652.

*Phorboid/C-Kinase Notes* gives safety, stability, and handling techniques for phorbol esters and related compounds. LC Services. Circle 649.

*Immunological Reagents* is a catalog containing information on 150 affinity-isolated antibodies. CALTAG Laboratories. Circle 653.

*Products for Biotechnology* is a catalog of enzyme-linked immunosorbent assay (ELISA) plates, multiple well plates, disposable serological pipettes, and flasks and tubes. Corning Glass Works. Circle 556.

**The Prediction of Ionospheric Conditions.** G. S. Ivanov-Kholodny and A. V. Mikhailov. Reidel, Dordrecht, 1986 (U.S. distributor, Kluwer, Norwell, MA). x, 168 pp., illus. \$49.95. Geophysics and Astrophysics Monographs. Translated from the Russian edition (Leningrad).

**Proceedings of the 1985 International Symposium on Lepton and Photon Interactions at High Energies.** (Kyoto, Aug. 1985.) Michiji Konuma and Kasude Takahashi, Eds. Published by the Organizing Committee, Yukawa Hall, Kyoto University, Kyoto, 1986 (U.S. distributor, Taylor and Francis, Philadelphia). viii, 977 pp., illus. \$81.

**Remote Sensing for Resources Development and Environmental Management.** M. C. J. Damen, G. Sisco Smit, and H. Th. Verstappen, Eds. Balkema, Accord, MA, 1986. Vol. 1, Visible and Infrared Data, Microwave Data, Spectral Signatures of Objects, Renewable Resources in Rural Areas. xvi pp. + pp. 1-548, illus. Vol. 2, Non-renewable Resources, Hydrology, Human Settlements, Geo Information Systems. x pp. + pp. 549-956, illus. \$106, with vol. 3. From a symposium, Enschede, The Netherlands, Aug. 1986.

**Research in Biology at Private Undergraduate Institutions.** Laura L. Mays Hoopes *et al.*, Eds. College Research Association of Biologists, Council on Undergraduate Research, Tucson, AZ, 1986. viii, 303 pp. Paper, \$30.

**Response Times.** Their Role in Inferring Elementary Mental Organization. R. Duncan Luce. Clarendon (Oxford University Press), New York, 1986. xvi, 562 pp., illus. \$8.75. Oxford Psychology Series, 8.

**Ringmakers of Saturn.** Norman R. Bergman. Pentland, Edinburgh, 1986. xii, 116 pp., illus. \$42.50.

**Safety Evaluation of Drugs and Chemicals.** W. Eugene Lloyd, Ed. Hemisphere, New York, 1986. xviii, 487 pp., illus. \$59.95. Based on a symposium, Ames, IA, June 1981.

**Safety of Computer Control Systems 1986.** (SAFECOMP '86.) Trends in Safe Real Time Computer Systems. W. J. Quirk, Ed. Published for the International Federation of Automatic Control by Pergamon, New York, 1986. viii, 193 pp., illus. \$45. From a workshop, Sarlat, France, Oct. 1986.

**Spinoza and the Sciences.** Marjorie Grene and Debra Nails, Eds. Reidel, Dordrecht, 1986 (U.S. distributor, Kluwer, Norwell, MA). xx, 336 pp. \$54.50. Boston Studies in the Philosophy of Science, vol. 91. Based on a symposium.

**Structural Analysis Systems.** Software-Hardware-Compatibility-Applications. A. Niku-Lari, Ed. Pergamon, New York, 1986. Vol. 4, CAD/CAM and Structural Analysis in Industry. xii, 272 pp., illus. \$57.50. Vol. 5, Finite, Boundary Element and Expert Systems in Structural Analysis. xii, 203 pp., illus. \$44. From a conference, Paris, Oct. 1986.

**Surface Waves in Plasmas and Solids.** S. Vukovic, Ed. World Scientific, Singapore, 1986 (U.S. distributor, Taylor and Francis, Philadelphia). xvi, 692 pp., illus. \$72. From a conference, Ohrid, Yugoslavia, Sept. 1985.

**Symbiosis.** An Introduction to Biological Associations. Vernon Ahmadjian and Surinder Paracer. Published for Clark University by University Press of New England, Hanover, NH, 1986. xii, 212 pp., illus. \$32.50.

**Synopsis of the Nomenclature of the Fixed Stars.** Helmut Werner and Felix Schmiedler. Wissenschaftliche Verlagsgesellschaft, Stuttgart, F.R.G., 1986. xii, 510 pp., illus. DM 138. Text in German and English.

**Targeting of Drugs with Synthetic Systems.** Gregory Gregoriadis, Judith Senior, and George Poste, Eds. Plenum, New York, 1986. viii, 299 pp., illus. \$52.50. NATO Advanced Science Institutes Series A, vol. 113. From an institute, Cape Sounion Beach, Greece, June 1985.

**Theories of Human Evolution.** A Century of Debate, 1844-1944. Peter J. Bowler. Johns Hopkins University Press, Baltimore, 1986. xvi, 318 pp., illus. \$32.50.

**The Three-Body Force in the Three-Nucleon System.** B. L. Berman and B. F. Gibson, Eds. Springer-Verlag, New York, 1986. xii, 530 pp., illus. \$48.40. Lecture Notes in Physics, 260. From a symposium, Washington, DC, April 1986.

**Tradeoffs.** Imperatives of Choice in a High-Tech World. Edward Wenk, Jr. Johns Hopkins University Press, Baltimore, 1986. xiv, 238 pp. \$19.95.

**Viral Hepatitis.** F. Callea, M. Zorzi, and V. J. Desmet, Eds. Springer-Verlag, New York, 1986. x, 110 pp., illus. \$37.40. Proceedings in Life Sciences. From a meeting, Brescia, Italy, 1985.

## Personnel Placement

**SCIENCE** publishes each Friday, except the last Friday of the year. Advertising is accepted only in writing; no abbreviations. Any deadline in ad must be at least 2 weeks after date of issue in which ad appears. 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.

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**Foreign M.D.** with background in molecular biology research, seeking postdoctoral or research associate position. Box 43, **SCIENCE**. X

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Application deadline: 10 April 1987. Contact: **Extension Personnel, 260 Coffey Hall, U of M, St. Paul, MN 55108. Telephone: 612-624-3717.**

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**ASSISTANT PROFESSOR, PHYSIOLOGY.** Full-time, tenure-track. **The Department of Basic Science, California College of Podiatric Medicine,** seeks a Ph.D. to coordinate and teach a course in human physiology. Ph.D. in physiology desirable; however, candidates with background in endocrinology or neurosciences are welcome to apply. Applicant must have a strong commitment to teaching. Starting salary commensurate with experience. A complete curriculum vitae and the names of three references should be sent by 15 April 1987 to: **Barbara M. Kriz, Ph.D., Chairperson, Search Committee, Department of Basic Science, California College of Podiatric Medicine, P.O. Box 7855, San Francisco, CA 94120. An Affirmative Action/Equal Opportunity Employer.**

## POSITIONS OPEN

**ASSISTANT PROFESSOR OF DEVELOPMENTAL BIOLOGY—TENURE-TRACK** Pan American University, Edinburg, Texas. A tenure-track position at the assistant professor rank is open (subject to availability of funds) beginning 1 September 1987. The salary (beginning at \$19,920 per 9-month academic year) depends on the qualifications and experience of the successful candidate. Qualifications include: earned Ph.D. from an accredited institution of higher learning, capable of teaching embryology, and at least two of the following: anatomy and physiology, comparative anatomy, mammalian physiology. The successful candidate will be expected to develop a graduate course in his/her specialty and participate in the general biology program. Normal loads in the biology department are 12 credit hours (15 contact hours). The successful candidate will be expected to obtain external funding, develop and maintain an active research program and participate in directing the thesis research of students leading to the M.S. in biology. **Closing Date:** 15 April 1987. Applicants should submit curriculum vitae, copies of recent representative publications, and arrange to have three letters of reference sent to: **Dr. T. C. Allison, Chairman of the Search Committee, 1210 West University, Pan American University, Edinburg, TX 78539.** Pan American University is an Equal Opportunity/Affirmative Action Employer.

### ASSISTANT PROFESSOR PLANT MOLECULAR BIOLOGIST

Department of biology is seeking applicants for a tenure-track plant molecular biology position. We seek an individual who will complement and strengthen existing plant biology programs. Applicants with backgrounds in the areas of plant-microbe interactions, plant virology, or photosynthesis are encouraged; however, we welcome applicants with interests in other areas of plant molecular biology or molecular genetics. The expected teaching load is about one course/quarter, to consist of a mix of undergraduate and graduate courses and seminars. To apply, send application with curriculum vitae, statement of research interests, and three letters of recommendation by 15 May 1987 to: **Dr. Neal Van Alfen, Department of Biology, Utah State University, Logan, UT 84322-4500.** Affirmative Action/Equal Opportunity Employer.

**ASSISTANT/ASSOCIATE PROFESSOR:** Tenure track, must have expertise in NMR spectroscopy of heart and brain. Will coordinate the physiological aspects of the NMR research on humans and animals being carried out at the University of New Mexico center for Non-Invasive Medical Diagnosis. Expected to develop an independent research program and provide quality teaching of medical and graduate students. **Deadline:** 1 July 1987. Submit curriculum vitae, statement of research interests, three references to: **Dr. Albert Ratner, Acting Chair, Physiology Department, University of New Mexico, School of Medicine, Albuquerque, NM 87131.** Affirmative Action/Equal Opportunity Employer.

**Morris College**, a private 4-year liberal arts college in Sumter, South Carolina, is seeking applicants to fill the following positions.

**ASSISTANT/ASSOCIATE PROFESSOR OF BIOLOGY**, to teach introductory and advanced biology courses including botany, genetics, and ecology. Ph.D. in chemistry preferred, master's degree acceptable.

**ASSISTANT/ASSOCIATE PROFESSOR OF CHEMISTRY**, to teach general chemistry and physical sciences. Ph.D. in chemistry preferred, master's degree acceptable.

**ASSISTANT/ASSOCIATE PROFESSOR OF MATHEMATICS**, to teach introductory and advanced mathematics courses, methods in the teaching of mathematics. Master's degree in mathematics required.

Submit letter of application, three letters of recommendation and official academic transcripts to: **Personnel Officer, Morris College, Sumter, SC 29150.** **Deadline** for accepting application is 17 April 1987. An Equal Opportunity/Affirmative Action Employer.

**BIOMEDICAL ENGINEER.** Eastern manufacturer of patient monitoring systems seeks individual for conceptual design, clinical/field testing, and customer coordination. We seek life science research or clinical engineering experience. Submit résumé to: **Box 41, SCIENCE.**

## POSITIONS OPEN

The Department of Microbiology, at The Ohio State University invites applications for a tenure-track **ASSISTANT PROFESSORSHIP IN VIROLOGY.** Candidates with interests in an aspect of viral disease or disease prevention are particularly encouraged to apply; however, candidates with expertise in any viral system will be considered. The successful candidate must have demonstrated their research potential by recent publications and will be expected to develop and maintain an independent research program, teach an undergraduate course in general virology, participate in the general teaching responsibilities of the Department and train graduate students. Candidates should have a Ph.D. degree and at least 2 years of postdoctoral experience.

Candidates should submit curriculum vitae, a summary of research plans and names of three references to: **Dr. Bruce S. Zwillig, Chairman, Virology Search Committee, Department of Microbiology, College of Biological Sciences, The Ohio State University, 484 West 12 Avenue, Columbus, OH 43210.** The position is available starting autumn 1987; applications received before 15 April 1987 will be considered in the first instance; however, applications will be accepted until the position is filled.

The Ohio State University is an Affirmative Action/Equal Opportunity Employer.

**ASSISTANT/ASSOCIATE PROFESSOR**, tenure-track to begin 1 July 1987. Interest in microbial pathogenesis is preferred. Duties: teach medical bacteriology to medical and graduate students; develop an independent research program. Send curriculum vitae and names of three references by 1 May 1987 to: **Dr. R. S. Desowitz, Chairman Search Committee, Department of Tropical Medicine and Medical Microbiology, University of Hawaii School of Medicine, 3675 Kilauea Avenue, Honolulu, HI 96816.** Equal Opportunity Employer.

### ASSISTANT RESEARCH PHYSICIST OR ASTRONOMER EUV INSTRUMENTATION AND PHYSICS

The Space Astrophysics Group at the University of California Berkeley has an opening for an assistant research physicist or astronomer. The position is for 2 years beginning 1 June 1987 with a high likelihood of extension. The responsibilities will include the testing of gratings, collimators, and other EUV optical components for NASA's Extreme Ultraviolet Explorer Satellite. The position will also require theoretical and analytic work in the design and testing of novel instrumentation for use in the EUV.

A Ph.D. in physics or astronomy with experience in space instrumentation is required. Laboratory experience with x-ray and EUV gratings, spectrometers, detectors, and other testing and calibration techniques is required.

Send résumé and three letters of recommendation by 30 April 1987 to:

**Dr. Roger F. Malina  
Space Sciences Laboratory  
University of California  
Berkeley, CA 94720**

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

**BIOMEDICAL ENGINEERING.** Worcester Polytechnic Institute (WPI) is continuing to expand its biomedical engineering program and a new tenure-track faculty position is available. Although the level of appointment and area of specialization are open, preference will be given to senior-level applicants in either Magnetic Resonance Imaging (MRI) or the in vivo application of magnetic resonance. Clinical and research magnetic resonance facilities are available at the Massachusetts Biotechnology Research Park in Worcester and strong collaborative ties with the University of Massachusetts Medical School in Worcester exist. Other areas of particular interest are: biomechanics, biomaterials, biosensors, applied neurophysiology, and application of mathematics and system analysis techniques to physiology. Candidates will be expected to develop a vigorous research program with external funding, and be committed to quality teaching. Applications should include curriculum vitae, statements of research and teaching interests, representative reprints/preprints, and names of three or more references to be sent to: **Dr. Robert A. Peura, Biomedical Engineering, WPI, Worcester, MA 01609.** Telephone: 617-793-5447. WPI is an Affirmative Action/Equal Opportunity Employer.

## POSITIONS OPEN

### ASSOCIATE RESEARCH SCIENTISTS AND POSTDOCTORAL RESEARCH SCIENTISTS

Study cis sequence and transacting protein regulation of eukaryotic transcription within a gene family. Send curriculum vitae and names of references to: **Dr. Philip Feigelson, Institute of Cancer Research, Columbia University, 701 West 168 Street, New York, NY 10032.** Columbia University is an Equal Opportunity/Affirmative Action Employer.

### CELL BIOLOGY AND PHYSIOLOGY WASHINGTON UNIVERSITY SCHOOL OF MEDICINE ST. LOUIS, MISSOURI

The Department of Cell Biology and Physiology, Washington University School of Medicine, St. Louis, Missouri, is expanding its commitment to research in the following areas: (i) membrane protein function and biogenesis; (ii) assembly, function, and movement of intracellular organelles; (iii) cell motility and contractility; and (iv) cell-cell and cell-matrix interactions. Individuals who employ novel biophysical and recombinant DNA methodologies are especially encouraged to apply. Tenure-track positions are available for successful candidates who will be expected to develop an independent research program and to participate in the training of medical and graduate students. Please submit curriculum vitae and the names of three references to: **Dr. Philip Stahl, Department of Cell Biology and Physiology, Washington University School of Medicine, 660 South Euclid Avenue, St. Louis, MO 63110.** An Affirmative Action/Equal Opportunity Employer.

### CELL AND MOLECULAR BIOLOGIST IN NEPHROLOGY

Adjunct Assistant Professor I level position available. Requires Ph.D. with at least 4 years of postdoctoral experience in cell biology of renal and uroepithelial cells with particular reference to control of cell growth. Expertise in establishment of primary cultures and development of methods for enhancing differentiated function in vitro. Experience in isolation, purification, and biology of growth factors. Experience in molecular biology and recombinant DNA technology. Instruct renal fellows in laboratory techniques and supervise research projects. Experience in general laboratory management. Demonstrated independent research experience by scientific publications. Salary: \$34,600 per year. **UCLA is an Equal Opportunity Employer.** Send résumé to: **Leon G. Fine, M.D., Professor and Chief, Division of Nephrology, UCLA School of Medicine, Los Angeles, CA 90024-1736.**

### UNIVERSITY OF QUEENSLAND Equal Opportunity in Employment is University Policy DIRECTOR COMMUNITY NUTRITION PROGRAM

Applications are invited for the position of Director, Community Nutrition Program.

The appointee will be responsible for a master's course in community nutrition conducted by the University of Queensland in collaboration with the Institute of Nutrition, Mahidol University and Khon Kaen University, in Thailand, and Universiti Kebangsaan Malaysia. The appointee, who will take part in other teaching and research activities, will be expected to have experience and qualifications in one of the behavioral, health, or agricultural sciences relevant to community nutrition in developing countries, be committed to an interdisciplinary approach to training community nutritionists, preferably have experience of "marketing" educational programs, have been involved in community projects, possess good human relations, and have contacts in the international nutrition area preferably, but not essentially, in Southeast Asia.

Appointment will be 3 or 5 years from date of appointment, and will carry university status, title and salary of Reader/Professor, currently A\$49,268 to A\$58,348 per annum with clinical loading of A\$10,433 if applicable; terms and conditions to be negotiated. Reference No. 12887.

Further information may be obtained from: the retiring Director, Associate Professor M.S. Gilliland, University of Queensland, St. Lucia 4067, Queensland, Australia. Telephone: 61-07-377 3837.

Applications, stating earliest date available for commencement of duties to: **Director, Personnel Services, University of Queensland, St. Lucia 4067, Queensland, Australia** by 29 May 1987.

## Molecular Biologist BS/MS

The Molecular Biology Research Unit of The Upjohn Company is currently building a group to work on molecular approaches to neurobiology. The successful Research Associate candidate will have a BS or MS degree plus at least one year of research experience in recombinant DNA techniques. This is a career position. A strong research background in cDNA/gene cloning and DNA sequencing is necessary. An interest in working in the area of diseases of the central nervous system is important, and CNS research experience and background will be a strong plus. Familiarity with *in vivo* expression system, such as *Xenopus* oocytes and transgenic models is preferred but not required. In addition to continued work using the candidates' expertise in molecular biology, the work will also include collaborative projects with other biotechnology units and the CNS Research group at Upjohn.

Kalamazoo is a medium-sized Southwestern Michigan community with immediate access to a rich mix of cultural, educational and recreational pursuits including numerous lakes and a four-season climate. Upjohn offers the opportunity for career growth, a competitive salary commensurate with experience, a comprehensive benefits program and relocation assistance.

For confidential consideration, please call, from outside of Michigan, toll free 1-800-253-8600, ext. 3-6767, (inside Michigan call collect 616-323-6767) to request an employment application be sent to you immediately. Please refer to ad number 1444-A when calling.

**Upjohn**

**Our Commitment to Scientific Excellence Continues...**

An Equal Opportunity Employer M/F

## Protein Engineer

Triton Biosciences Inc., an entrepreneurial subsidiary of Shell Oil Company, is an emerging biotechnology company engaged in the development of diagnostics and therapeutics for human health care. Our company is built upon a strong base of research expertise, solid support, and responsive management.

An excellent opportunity exists for an innovative researcher in our Protein Chemistry Department. The successful candidate will apply molecular modeling techniques to the design of protein and peptide analogs which may have utility as cancer therapeutic agents. Candidates should have a Ph.D. with 3-5 years experience and a strong background in protein crystallography and computer graphics.

Triton is located in the San Francisco Bay Area and offers competitive salaries and benefits. For prompt consideration, please forward your C.V. along with salary requirements and the names of three references to: Triton Biosciences Inc., Box PE, 1501 Harbor Bay Parkway, Alameda, CA 94501. An Equal Opportunity Employer.



Triton Biosciences Inc.

## Postdoctoral Scientist Drug Metabolism

The Drug Metabolism Department of Smith Kline & French Laboratories, located in suburban Philadelphia, Pennsylvania, is seeking a Postdoctoral Scientist to perform basic research in an area relevant to Drug Metabolism. This position offers the opportunity to interact with senior members of the department to facilitate professional growth. Candidates will report research results within the company and at national scientific meetings and are encouraged to publish these results in leading trade journals.

Our postdoctoral positions are normally of two years duration.

The successful candidate is required to have:

- a Ph.D. in Biochemistry, Pharmacology or related area.
- experience in the preparation of subcellular fractions for studies of xenobiotic metabolism.
- working knowledge of bioanalytical techniques such as GC and HPLC.
- demonstrated ability to apply multi-disciplinary techniques to hypothesis testing.

We offer an excellent compensation, benefits and relocation package as well as opportunities for personal and professional growth. Please forward your C.V. and the names of three references to: Robert F. Obst, R&D Senior Employment Consultant, SmithKline Beckman Corporation, 1560 Spring Garden Street, Philadelphia, PA 19101. We are an Equal Opportunity Employer, M/F/H/V.

**SK&F**  
A SmithKline Beckman Company

## Molecular Biologist Postdoctoral Scientist

The Molecular Biology Research Unit of The Upjohn Company is currently building a group to work on molecular approaches to neurobiology. The successful candidate will have a Ph.D. in biochemistry, molecular biology or related discipline. Significant research accomplishment with evidence by publications is important. This position will involve a two-year appointment. A strong research background in cDNA cloning and DNA sequencing is necessary. An interest in working in the area of diseases of the central nervous system is important and CNS research experience and background will be a stronger plus. Familiarity with *in vivo* expression system such as *Xenopus* oocytes and transgenic models is preferred but not required. In addition to continued work using the candidate's expertise in molecular biology, the work will also include collaborative projects with other biotechnology units and the CNS Research group at Upjohn.

Kalamazoo is a medium-sized Southwestern Michigan community with immediate access to a rich mix of cultural, educational and recreational pursuits including numerous lakes and a four-season climate.

For confidential consideration, please call toll free 1-800-253-8600, ext. 3-6767, (inside Michigan call collect 616-323-6767) to request an employment application be sent to you immediately. Please refer to ad number 21051-F when calling.

**Upjohn**

**Our Commitment to Scientific Excellence Continues...**

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## Accelerator Physicists

The Lawrence Berkeley Laboratory will shortly enter the construction phase of the 1-2 GeV Synchrotron Radiation Source Project. The source consists of a 1-2 GeV electron storage ring fed by a 15 GeV synchrotron and a 50 MeV linac. We invite applications for 2 positions within the Accelerator System Group for:

### Staff Scientist II

The incumbent will assist in finalizing the parameters of the various components of the 1-2 GeV Synchrotron Radiation Source. Will participate in all aspects of Source commissioning and will play an active role in developing the Source to its fullest potential.

The successful candidate must have demonstrated experience in accelerator physics and have a proven track record in design or utilization of circular or linear accelerators. Must have specific experience in one or more of the following fields: rf design, magnet design, diagnostics, linear dynamics, control systems, feedback systems. Prefer a PhD in Physics.

### Staff Scientist III

Reporting to the Head of the Accelerator Systems Group, the incumbent will bear primary responsibility for defining the detailed specifications of the storage ring for the 1-2 GeV Synchrotron Radiation Source. Will lead integration of the subsystems of the light source. Will play a lead role in the commissioning of the source. Will provide technical direction and supervision to project staff.

The successful candidate will be an experienced Accelerator Physicist, with proven expertise in the design and commissioning of electron storage rings or electron synchrotrons. Will have particular experience in at least one of the following fields: rf (design, coupled bunch instabilities), magnet design, diagnostics, control systems, feedback systems.

To apply, send 2 copies of curriculum vitae, representative publications and the names and addresses of three references to: Lawrence Berkeley Laboratory, #1 Cyclotron Road, Employment Office 90-1042, Berkeley, CA 94720. Refer to Job #A/4091 for Staff Scientist II and Job #A/4090 for Staff Scientist III. An Equal Opportunity Employer. M/F/H.



LAWRENCE  
BERKELEY  
LABORATORY

## RESEARCH ASSOCIATES Protein Chemistry/ Immunology

An industry leader in advanced biotechnology, **Amgen** develops products in the human health care area. We have immediate opportunities for Research Associates to provide support in our Protein Chemistry and Immunology Departments in the characterization of natural and recombinant proteins.

### PROTEIN CHEMISTRY

Qualified candidates for the protein chemistry positions should have a BS/MS in Chemistry, Biochemistry, or a related field. Experience in the manipulation and characterization and purification of proteins is essential. Additional experience in electrophoresis and HPLC is desirable. (Dept. 240a)

### IMMUNOLOGY

Qualified candidates should have a BS/MS in Immunology, Biochemistry or a related field, and experience in mammalian cell culture as well as immunoassay development. (Dept. 125)

**Amgen** is located in an attractive community about an hour northwest of Los Angeles and offers a stimulating and challenging scientific environment, as well as excellent compensation and benefit programs. Applicants should direct a resume and the names of 3 references to:

Recruitment (Specify Dept. #)

**AMGEN**

1900 Oak Terrace Lane  
Thousand Oaks, CA 91320



Equal Opportunity Employer

Abbott Laboratories' breakthroughs in research and development have won us the undisputed world leadership position in medical diagnostics. The potential of this field is tremendous, a trend which industry experts predict will continue to grow. As the fastest growing division of our \$3.8 billion corporation, our Diagnostics Division is aggressively forging ahead, creating the following positions.

### M.S./Ph.D. Genetics/Molecular Biology

These individuals will work with an interdisciplinary team in the research and development of nucleic acid probes for clinically useful diagnostic assays. Qualified candidates will have either an M.S. or a Ph.D. with at least 1-2 years postdoctoral training or equivalent.

### Ph.D. Biochemists/Immunochemistry

These individuals will be involved in protein purification and immunoassay development in HTLV III and Hepatitis B research areas. You will need a Ph.D. in Biochemistry or Immunology, plus at least 2 years related postdoctoral experience. We would prefer a strong immunological background with some supervisory experience.

Voted one of the five best managed companies in 1986 by Dun's Magazine, Abbott provides excellent salaries and comprehensive benefits including profit sharing and stock retirement plan. We are located in an attractive suburban area, just 30 miles north of Chicago. **For confidential consideration, send your resume with salary history to: Stephanie Mondello, Dept. S/3-27.** Abbott is an affirmative action employer.

### MEETING BOUND?

Abbott Representatives will be at the FASEB meeting in Washington, DC on March 30. If you will not be able to attend, send your resume to Stephanie Mondello.

**ABBOTT**  
ABBOTT PARK IL 60064  
"Health Care Worldwide"

## POSITIONS OPEN

**BIOTECHNOLOGY, RESEARCH ASSISTANT.** A challenging position for a protein chemistry specialist is open at the Rockefeller University Biopolymer Facility. Successful applicants will have a B.S. or M.S. and experience in peptide or DNA synthesis. The facility is presently equipped with two gas-phase sequencers, a peptide synthesizer, and a DNA synthesizer. Salary negotiable, based on qualifications and experience. Excellent benefits and beautiful working environment. Send résumé and letters of recommendation to: **Personnel Office, Rockefeller University, 1230 York Avenue, New York, NY 10021. An Equal Opportunity Employer.**

### CHAIR DEPARTMENT OF PHYSICS EMORY UNIVERSITY

Applications and nominations are invited for the position of Professor and Chair of the Department of Physics of Emory University. We seek candidates with distinguished records in research and teaching, with proven administrative skills, and with leadership ability to guide the Department during a period of rapid growth in size, quality, and reputation. The department, which now has twelve faculty members, will have the opportunity to add at least five to six new faculty, at both junior and senior ranks, over the next five years. It will move into high quality space in a new research building in the summer of 1989.

The Department is committed to Emory's liberal arts tradition, with strong commitment to teaching and to philosophical breadth; yet it also recognizes the need within that context to build graduate training and research strength in a few carefully chosen areas. Growth is expected to complement the present emphases in condensed matter physics and biophysics, and offers the possibility of adding a third area of specialization yet to be chosen.

Persons interested in being considered or in nominating candidates please contact **Billy E. Frye, Chair, Physics Search Committee, 305 Administration Building, Emory University, Atlanta, GA 30322.** Applications and nominations will be received until 1 December 1987 or until a suitable candidate has been found. *Emory is an Equal Opportunity/Affirmative Action Employer.*

**CHAIRPERSON, Department of Anatomy, West Virginia University,** seeks a chairperson for its department of anatomy. The successful candidate must have M.D. and/or Ph.D. degree, should have a record of scholarly academic and research achievements, and proven leadership ability. We are searching for an individual to administer the rigorous teaching and research missions in the department and to plan and implement programs in cell and molecular biology that will interface with a newly established Regional Cancer Center. Applicants should send curriculum vitae and names and addresses of three references to: **Nathaniel F. Rodman, M.D., Department of Pathology, West Virginia University, School of Medicine, Morgantown, WV 26506,** not later than 18 May 1987. *West Virginia University is an Affirmative Action/Equal Opportunity Employer.*

### CHAIRPERSON DEPARTMENT OF VETERINARY ANATOMY COLLEGE OF VETERINARY MEDICINE THE OHIO STATE UNIVERSITY

The Ohio State University College of Veterinary Medicine invites nominations or applications for the position of Chairperson of the Department of Veterinary Anatomy. An excellent opportunity exists for growth in this department with young faculty, positions to be filled, and new office, teaching, and research facilities.

The candidate must possess a doctoral degree, demonstrated excellence in research and teaching, enthusiasm, and leadership ability. The responsibilities include administration of the professional and graduate teaching and research programs in veterinary anatomy. Active participation in teaching and research is also expected.

Applications should be accompanied by curriculum vitae and the names of three references. Contact: **Dr. Philip W. Murdick, Chair, Search Committee, College of Veterinary Medicine, 1900 Coffey Road, Columbus, OH 43210.** It is suggested that applications be submitted as soon as possible. Applications will be accepted until the position is filled.

*The Ohio State University is an Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### CHAIR DEPARTMENT OF BIOLOGY EMORY UNIVERSITY

Emory University is inviting applications or nominations for the position of Professor and Chair of the Department of Biology. We seek candidates with distinguished records in research and teaching, with administrative ability, and with the leadership qualities that will be needed to help the biology department in its effort to rise quickly to national distinction. The department, which now has thirteen faculty members representing four subdisciplines, will have the opportunity to add at least eight new faculty members over the next 5 years. This growth will include both junior and senior appointments, and may include a major endowed chair if a suitable candidate is identified. Construction of a new research building has just begun that will enable the department to move into high quality research space during the summer of 1989.

The Department is committed to a liberal arts tradition, with strong commitment to teaching and to breadth, yet recognizes the need within that context to select a few carefully chosen fields for emphasis. In this regard the future of the department could be further strengthened by a divisional organization of the biological sciences, including the basic health science departments. This is now under consideration and could permit building of greater foci of strength in graduate education and research.

Persons interested in being considered or in nominating candidates, please contact: **Billy E. Frye, Chair, Biology Search Committee, 305 Administration Building, Emory University, Atlanta, GA 30322.** Applications and nominations will be received until 1 December 1987 or until a suitable candidate has been found. *Emory is an Equal Opportunity/Affirmative Action Employer.*

### CHAIRPERSON—BIOLOGY

Applications and nominations are invited for the position of **CHAIRPERSON OF THE DEPARTMENT OF BIOLOGICAL SCIENCES, The Wichita State University.** The University is located in a metropolitan area of nearly 400,000 people and enrolls more than 16,000 students. The department has eleven full-time faculty and offers the B.A., B.S., and M.S. degrees.

Candidates should have the Ph.D., experience in university teaching, a strong record of scholarly achievement, and evidence of potential for academic and administrative leadership. In addition to administering the department, the successful candidate will be expected to continue his/her research and scholarly activities and participate in the teaching program. Leadership will be expected in the recruitment of additional faculty, in promoting faculty research, in solicitation of external funding, and in strengthening the undergraduate and graduate programs. Rank and salary will be commensurate with qualifications. Position begins January 1988 or earlier if possible.

Send letters of interest, curriculum vitae, and names of at least three references by 24 April 1987 to: **Chairperson Search Committee, Department of Biological Sciences, The Wichita State University, Wichita, KS 67208.** *An Equal Opportunity/Affirmative Action Employer.*

### CHAIRPERSON AND PROFESSOR OF OBSTETRICS/GYNECOLOGY

The University of Cincinnati College of Medicine invites applications and/or nominations for the position of Professor and Chairperson of the Department of Obstetrics and Gynecology. Candidates should have demonstrated abilities in leadership and administration with a strong commitment to clinical excellence and teaching. Increased support and growth in department research is expected. The successful candidate will also be expected to recruit new faculty and provide leadership in program development in the areas of endocrinology, oncology, and maternal fetal medicine.

Please send nominations and applications with curriculum vitae to:

**Phillip O. Bridenbaugh, M.D.,  
Chairman, Search Committee  
Department of Anesthesia  
University of Cincinnati  
College of Medicine  
Cincinnati, OH 45267-0531**

## POSITIONS OPEN

**CHEMICAL ENGINEER.** B.S. in chemical engineering with a minimum of 1 year of research experience or M.S. in chemical engineering. Must have experience with FORTRAN and BASIC computer programming languages and experience with commercial spreadsheet and database management software for microcomputers. Will develop mass and energy balances for industrial and environmental control processes using mass transfer principles to estimate the transport rate of pollutants through solid, liquid, and gaseous phases. Will develop engineering cost estimates for processes used to reduce pollutant emissions and prepare technical reports describing the work performed for the above purposes. Will write computer programs to solve repetitive, applied engineering problems and prepare descriptive technical reports and use spreadsheet and database management such as LOTUS and DBASE III to manipulate and analyze test data. Starting salary will be \$2200 per month for a 40-hour work week. To apply contact: **Job Service, 516 North Mangum Street, Durham, NC 28658,** or your nearest Job Service office. Refer to: **Job Order Number NC 6109273, DOT code 008.061-022.** *An Equal Opportunity/Affirmative Action Employer.*

**CHEMISTRY AND BIOLOGY**—Position opening in mid-August 1987 in small Catholic College Seminary in east-central Iowa. Responsible for teaching a variety of undergraduate courses to both majors and non-majors. Qualifications: M.S. or Ph.D. in chemistry and/or biology. Salary and rank commensurate with qualifications and experience. Application deadline: 15 April 1987. Send curriculum vitae, three references, salary history, and college placement credentials to: **Chair, Department of Science/Math, Divine Word College, Epworth, IA 52045.** *Affirmative Action/Equal Opportunity Employer.*

### CLINICAL PHARMACOLOGIST

The University of Texas Medical School at Houston invites applications for faculty positions as part of a newly created program in clinical pharmacology. Responsibilities include research, teaching, and patient care. Preferred areas of interest include allergy, geriatrics, and virology, but any clinical specialty or research area will be considered. Interested individuals should send a covering letter outlining future plans, curriculum vitae including bibliography and the names of three individuals who may be contacted as references to: **Dr. G. Alan Robison, Department of Pharmacology, University of Texas Medical School, P.O. Box 20708, Houston, TX 77225.** The deadline for the receipt of applications is 30 April 1987. *An Equal Opportunity Employer. Women and minorities are encouraged to apply.*

**CLINICAL SCIENTIST** for manufacturer of diagnostic imaging equipment located in Cleveland, Ohio, area. Will develop and implement advanced techniques for Nuclear Magnetic Resonance (NMR) imaging and research; work with major universities in technical, clinical, and research collaboration, directing a project from inception to completion; work with engineering to incorporate resulting techniques into machine design; participate in education and training programs for physicians, physicists, and magnetic resonance technicians. Requires Ph.D. in medical physics plus 2 years of experience working directly with NMR. Forty hours per week; \$3833 per month. Qualified applicants reply immediately with résumé to: **L. Ellison, JO #3032780, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

The American Paralysis Association (APA) will consider funding research by doctoral level scientists aimed at a cure of paralysis resulting from spinal cord injury, head injury, and stroke.

APA's areas of interest are:

**PHARMACOLOGICAL AGENTS AND  
GROWTH FACTORS  
EMBRYONIC CELL IMPLANTATION  
ELECTRICAL, ELECTROMAGNETIC AND  
LIGHT STIMULATION  
SURGICAL TECHNIQUES AND PROCESSES**

For information, write or call:

**Herbert E. Spiegel, Ph.D.,  
Research Director  
American Paralysis Association  
55 Morris Avenue, Suite 309  
Springfield, NJ 07081  
Telephone: 201-376-8884**

## ***We Said NO. So You Could Say YES!***

IGEN, Inc. turned down a major pharmaceutical firm's offer to purchase us because we believe IGEN can become one of the major diagnostics and pharmaceuticals companies of the future. If you are a recent Ph.D. graduate with a research thesis in the field of chemistry and enzymology of oligonucleotides or an M.S. degree chemist with several years of experience in nucleotide chemistry, you may be qualified for the challenge.

### **RESEARCH ASSOCIATE**

The successful professional will perform chemical synthesis of oligonucleotides and modified nucleotides and will develop purification and analytical procedures for these products.

If you would like to join a dynamic biotechnology firm dedicated to the development of proprietary diagnostic systems and pharmaceuticals, send your resume with salary history to: IGEN, Inc., 1530 East Jefferson Street, Rockville, Maryland 20852.

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An Equal Opportunity Employer

## **BIOCHEMISTS MOLECULAR / CELLULAR BIOLOGISTS**

Merck Sharp & Dohme Research Laboratories is currently seeking individuals for doctoral, post-doctoral, and masters level positions in the Department of Biological Research. We are expanding our research efforts in two areas: polypeptide growth factors and molecular biology of ion channels. Selected candidates will contribute to research in these areas using techniques of molecular and cellular biology and protein biochemistry.

Candidates must possess significant experience in gene cloning, or expertise in membrane biochemistry, enzymology, and protein purification or proficiency in tissue culture.

Excellent salary and benefits programs accompany these positions at our research facilities located 25 miles northwest of Philadelphia.

Reply in confidence to:

**Manager, Personnel Relations**

### **MERCK SHARP & DOHME RESEARCH LABORATORIES**

**West Point, PA 19486**

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**Merck & Co., Inc.**

Join An Emerging Leader in

## **DNA PROBE TECHNOLOGY**

Life Technologies, Inc. is expanding its program to develop new clinical diagnostic products based on nucleic acid detection.

*We are seeking:*

### **ASSAY DESIGN ENGINEER**

- Use your industry experience in designing and formatting of clinical diagnostics assays and systems.
- Coordinate and implement formatting concerns for DNA-based diagnostics.
- Supervise a group of interdisciplinary scientists.

We are a successful biotechnology company with a strong reputation in the industry. The leadership enjoyed by our GIBCO and BRL products in molecular and cell biology is evidence of our commitment to excellence.

Our salary and benefits are highly competitive. Our location combines the scenic countryside of suburban Maryland with the cultural vitality of Washington, D.C.

Other scientific positions are available.

Candidates should send resumes to:

Mr. Richard L. Hotaling, Jr.  
LIFE TECHNOLOGIES, INC.  
8717 Grovemont Circle  
Gaithersburg, MD 20877

An equal opportunity employer, M/F/H/V

## **Assistant Director Cell Culture**

The Biological Process Sciences Department of Smith Kline & French Laboratories, located in suburban Philadelphia, Pennsylvania, is seeking an Assistant Director of its Cell Culture Group. This individual will be responsible for the scientific leadership of a team of experienced cell biologists who develop cell lines, expression systems, and culture technologies suitable for scaling-up to pilot plant and manufacturing capacities. The Group is currently engaged in highly visible assignments in major projects in SK&F concerned with tissue plasminogen activator, second generation thrombolytics, and growth factors with therapeutic potential. The group is expected to conduct self-initiated research with general applications as well as research which impacts specific product opportunities.

Applicants should have a Ph.D. in Eukaryotic Cell Biology or Biochemical Engineering with a solid background in eukaryotic cell biology, and a minimum of six years experience beyond the Ph.D. degree in academia or industry. Significant experience in the scaling-up of cell culture processes beyond IOL level is required. A working knowledge of suspension, microcarrier, and membrane culture systems, GMP, RAC guidelines, and FDA guidelines for producing biopharmaceuticals in cell lines is desired. The successful candidate will have a strong publication record, outstanding oral and written communication skills, and high leadership potential.

We offer an excellent compensation, benefits and relocation packages as well as opportunities for personal and professional growth. Publication of research results is encouraged and supported. For confidential review, please forward your C.V. and names of three references to: Robert F. Obst, R&D Senior Employment Consultant, SmithKline Beckman Corporation, 1562 Spring Garden Street, Philadelphia, PA 19101. We are an Equal Opportunity Employer, M/F/H/V.

**SK&F**  
A SmithKline Beckman Company



## POSITIONS OPEN

### DEVELOPMENTAL BIOLOGY The Salk Institute

The Salk Institute invites applications for **Assistant Professor** positions in developmental biology, particularly in areas related to neurobiology and cancer research. Candidates should have Ph.D. or M.D. degree and postdoctoral research experience. Please send résumé, outline of research interests, and names of three references to:

Faculty Chair  
The Salk Institute  
P.O. Box 85800  
San Diego, CA 92138  
*An Equal Opportunity Employer.*

### DIRECTOR, PUBLIC AFFAIRS OFFICE

Director, Public Affairs Office for the Ecological Society of America (ESA). Scientific credentials in ecology and experience in related environmental areas; graduate degree preferred. Experience in public affairs essential, especially at the state and federal level. Familiarity with other professional societies and national scientific organizations. Maturity, judgment, and administrative/organizational skills necessary. Applicant must be able to work independently and effectively, have good interpersonal abilities, and possess persuasive communication skills. Salary negotiable based upon experience. Job description available upon request. Applicants should submit: statement of interest in this position, résumé, and three letters of reference emphasizing both scientific credentials and experience in public affairs-related activities.

Reply to: **Dr. David E. Reichle, Chairman, ESA Public Affairs Committee, Oak Ridge National Laboratory, P.O. Box X, Building 1505, MS-037, Oak Ridge, TN 37831-6037** by 17 April 1987.

*The Ecological Society of America is an Affirmative Action/Equal Opportunity Employer.*

### U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE SOUTHERN FOREST EXPERIMENT STATION

**ECOLOGIST**, Stoneville, Mississippi. The Southern Station is seeking an ecologist (temporary, 2 years) to conduct research on the impact of man-induced alterations on composition of the bottomland hardwood forests and on their potential for producing fiber and wildlife habitat and for providing flood protection and pollution control. Research will provide increased understanding of the ecological processes and adaptations within unmodified and disturbed bottomland hardwood ecosystems. Drainage, controlled and uncontrolled flooding, and partial and total timber harvest are among common events in the bottomlands. The incumbent must pull together existing data to develop ecosystem models that show the impacts of management practices and provide guidelines that assure all important functions can be maintained without deterioration of bottomland ecosystems. **REQUIREMENTS:** In-depth knowledge of bottomland forest ecosystems; knowledge of and skill in quantitatively evaluating relationships within forest ecosystems and dynamic simulation modeling; and the ability to express ideas effectively orally and in writing are required. Either a master's or Ph.D. or equivalent education and experience are required. U.S. citizenship is required. Salary commensurate with experience, GS-11/12 (\$27,172 to \$32,567). Information concerning the position may be obtained by **telephone: 504-589-3921; no collect calls.** *The USDA is an Equal Opportunity/Affirmative Action Employer.*

**ENTOMOLOGIST.** Two research positions available at the assistant scientist II level beginning 1 July 1987. The Ph.D. is required. Salary, \$34,196. (i) Entomologist to conduct field, laboratory, and greenhouse studies on the control and biology of insects damaging vegetable crops; (ii) medical entomologist to conduct field and laboratory investigations on the control and biology of ticks. Please submit applications, consisting of undergraduate and graduate transcripts, a list of three references, curriculum vitae, reprints of publications, summary of Ph.D. thesis, and a statement of research interests to: **Dr. John F. Anderson, Head, Department of Entomology, Connecticut Agricultural Experiment Station, P.O. Box 1106, New Haven, CT 06504.** *An Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**ECOLOGIST/PHYSIOLOGIST.** Conduct research in tree and stand responses to nutrient limitations and water and other environmental stresses in conjunction with programs in forest genetics, nutrition, biotechnology, and hardwood management. Associate or experienced assistant professor. Send résumé, transcripts, and three letters of recommendation by 1 May 1987 to: **A. W. Cooper, Head, Department of Forestry, North Carolina State University, Raleigh, NC 27695-8002.**

### FACULTY OPENINGS BIOTECHNOLOGY

Faculty positions are available at the full professor, associate professor, and assistant professor levels in **The Center for Biotechnology at Baylor College of Medicine.** This Center is located in a new Baylor building in The Research Forest of The Woodlands, a 25,000-acre wooded community 30 miles north of Houston. The Center consists of the following divisions: (i) Hybridoma Technology, (ii) Recombinant DNA Technology, (iii) Protein Engineering, (iv) Bio-organic Chemistry, (v) Vision Research, and (vi) Cellular and Molecular Neurobiology. Applicants should have research backgrounds in one of these areas. Exceptional candidates may also be considered for positions as Division Heads. Although academic excellence is the determining factor in the selection process, experience and interest in biotechnological applications are also desirable. Please send résumé, names of several references, and a brief description of research experience and future goals to:

**Dr. Dominic Man-Kit Lam, Director  
The Center For Biotechnology  
Baylor College of Medicine  
4000 Research Forest Drive  
The Woodlands, Texas 77381**

*An Equal Opportunity/Affirmative Action Employer.*

**Oregon State University** announces **FOUR FACULTY POSITIONS IN RESEARCH** and continuing education are being established as part of a 10-year **Coastal Oregon Productivity Enhancement (COPE) Research and Development Program.** Positions are available 1 July 1987, and will be located in Newport, Oregon. Responsibilities are to develop and conduct research and continuing education programs in Oregon's Coast Range in managed second-growth forests as part of a four-person interdisciplinary team. All positions are assistant professor, 12-month, fixed-term appointments with annual reappointment potential for the duration of this 10-year program. The positions are:

- (i) **SILVICULTURIST**—reforestation-related silviculture.
  - (ii) **SOIL SCIENTIST/HYDROLOGIST**—landslides and terrestrial-aquatic ecosystem interactions.
  - (iii) **FISH HABITAT SCIENTIST**—aquatic habitat relationships in managed forest ecosystems.
  - (iv) **WILDLIFE HABITAT SCIENTIST**—wildlife habitat relationships in managed forest ecosystems.
- Ph.D. in specialty area or a closely related field; experience in subject area research and Pacific Northwest conditions desirable. Salary \$28,000 to \$30,000 per annum, dependent upon qualifications. Application closing date 1 June 1987. More detailed position descriptions are available. Send inquiries or letter of application, résumé, three letters of recommendation, and transcripts to: **COPE Search Committee, College of Forestry, Oregon State University, Corvallis, OR 97331.** *An Equal Employment Opportunity/Affirmative Action Employer. Complies with Section 504 of the Rehabilitation Act of 1973.*

**ICHTHYOLOGIST.** The National Marine Fisheries Service (NMFS) National Systematics Laboratory (located in the National Museum of Natural History) carries out systematic studies on groups of economically important marine organisms. A position for a systematic ichthyologist to revise important groups of marine fishes such as clupeids and engraulids should open about 1 September 1987. The current starting salary at the GS-11/12 level is \$27,172 to \$32,567. For further information, contact: **Dr. Michael Vecchione, NMFS Systematics Laboratory, National Museum of Natural History, Washington, DC 20560.** Application information may be obtained from: Personnel Division, Eastern Administrative Support Center, 253 Monticello Avenue, Room 409, Norfolk, VA 23510; telephone: 804-441-6880. *An Equal Opportunity Employer.*

## POSITIONS OPEN

**Princeton University**—The Department of Biology has an opening for 1 year at the level of **LECTURER** beginning in September 1987. The successful applicant will teach a fall laboratory course in experimental vertebrate biology, which is complementary to an existing lecture course, emphasizing neuroendocrine mechanisms of vertebrate reproductive biology. During the spring semester, the lecturer will teach half of a lecture course in animal behavior emphasizing mechanism of behavior. Opportunity will be available to carry out some research in the area of animal behavior including vertebrate reproductive biology. Ph.D. degree or equivalent required. Submit letter of application, curriculum vitae, and have three letters of recommendation sent to: **Mrs. E. Lechner, Secretary to the Search Committee, Department of Biology, Princeton University, Princeton, NJ 08544.**

Deadline for receipt of application material is 13 April 1987.

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

**MICROBIOLOGIST:** The Department of Microbiology, University of Alberta, invites applications for an independent research position from qualified individuals with demonstrated research abilities in basic or applied problems in microbiology. Candidates using biochemical/molecular approaches will be accorded special preference. Candidates should have a recent Ph.D. and relevant postdoctoral experience. The position is a 5-year renewable term appointment at the assistant professor level (salary range: \$31,612 to \$45,340) and will be contingent upon a successful application for a competitive award from an external agency. Successful applicants pursuing research of medical relevance may also be eligible for substantial research establishment funding. Duties include development of an independent research program, graduate student supervision, and some appropriate classroom teaching. Applications, containing curriculum vitae, names, addresses, and telephone numbers of three or more referees, and a concise but specific description of research interests, and proposed work should be sent to: **Dr. S. E. Jensen, Department of Microbiology, University of Alberta, Edmonton, Alberta, Canada, T6G 2E9.** The closing date for applications is 30 June 1987.

*The University of Alberta is an Equal Opportunity Employer, but priority will be given to Canadian citizens and permanent residents of Canada.*

**MOLECULAR BIOLOGY AND BIOCHEMISTRY:** Graduate assistantships in a department emphasizing student-faculty interactions. Research in regulation of gene expression, structure and function of heterochromatin, protein-nucleic acid interactions, DNA replication, oncogenes, biochemistry of embryonic development, physical biochemistry, NMR spectroscopy, ascorbic acid, phosphate structure and mechanisms, and protein folding. Tuition remission, dependency allowance, good fringe benefits, and opportunities to teach. Only a few remaining openings. **Write Graduate Admissions, Department of Molecular Biology and Biochemistry, Wesleyan University, Middletown, CT 06457** or telephone 203-347-9411 extension 2796 days or 203-346-0900 evenings.

**NEUROLOGIST**—Board Certified. Instructor level. Full-time, nontenure position with training and experience in immunobiology of sleep disorders. Contact: **N. A. Vick, M.D., Evanston Hospital, 2650 Ridge Avenue, Evanston, IL 60201.** *An Equal Opportunity Employer M/F.*

### NEUROPATHOLOGIST

The Department of Pathology at Columbia University, College of Physicians and Surgeons, seeks one or more senior neuropathologists to assume diagnostic, teaching, and research functions at the college and its affiliated hospitals.

The individuals chosen must have formal training in biochemistry, Board Certification in pathology and neuropathology, and substantial current research support.

The appointment is envisioned at the associate professor level and the applicant must meet the Columbia standards for appointment to tenured status. Résumé to: **Department of Pathology, College of Physicians and Surgeons, 630 West 168 Street, New York, NY 10032.** *Affirmative Action/Equal Opportunity Employer.*

## FRIEDRICH MIESCHER-INSTITUT

Applications are invited for the position of a

### GROUP LEADER IN PLANT BIOLOGY

Candidates should have a strong research background in Plant Sciences at the cell and/or molecular level, as well as a demonstrated ability to develop an independent research programme and to lead a group. The candidate will be expected to carry out research in an area complementing the work of five other group leaders: Witek Filipowicz (gene expression and RNA processing), Barbara Hohn (genetic flux in plants), Thomas Hohn (molecular plant virology), Patrick King (a genetic approach to plant hormones), and Frederick Meins (plant development). The groups each consist of postdoctoral fellows, graduate students and technical staff, and occupy independent laboratories.

We would prefer to make the appointment at the level of a senior group leader, but an appointment at a more junior level is not excluded. A curriculum vitae and a list of publications should be submitted before April 30, 1987 to: **Search Committee (Plant Group Leader), Friedrich Miescher-Institut, P.O. Box 2543, 4002 Basel, Switzerland.**

## MOLECULAR GENETICS BIOCHEMISTRY

The Henkel Group, a leader in applied oleochemistry, seeks Scientists to join their expanding biotechnology efforts. Positions of responsibility are available at **Henkel's U.S. Research Facility** in Santa Rosa, California.

### RESEARCH ASSOCIATE

The successful candidate will report to the Director and assist in program development as well as conduct research. Applicants should have a Ph.D. in Biochemistry, Microbiology or related field and five or more years experience after postdoctorate in industry or academia. Scientific leadership in eukaryotic molecular genetics (yeast, fungi, plants) is essential. Experience in directing Ph.D. scientists is required.

### SENIOR RESEARCH SCIENTISTS

Applicants should have a Ph.D. in Biochemistry, Microbiology or related field, preferably with postdoctoral experience. Successful candidates will plan, direct and conduct research in the use of enzymes for new and improved biochemical conversions.

For confidential consideration, send your resume, list of references and salary requirements by April 17, 1987 to:

**Ms. Carol Sullivan  
Director of Personnel  
Henkel Research Corporation  
2330 Circadian Way  
Santa Rosa, CA 95407**

An Equal Opportunity Employer M/F

**Henkel**

## Enzymatics, Inc.

Enzymatics is a well-financed company developing a new generation of colorimetric diagnostics for medical and industrial markets. Highly motivated scientists are being sought for the following positions:

**Research Scientist-** Requires a PhD in Chemistry or Biochemistry and 2+ years post doctoral experience. A "knack" for synthetic organic chemistry and enzymology is required.

**Process Development Engineer-** This "hands-on" position is responsible for establishing and maintaining our manufacturing processes. Requires 7+ years of pharmaceutical or diagnostic experience. Knowledge of plastics or thin film technology is helpful.

**Research Assistant-** Requires an MS/BS with at least two years of laboratory experience in organic chemistry or biochemistry.

These positions represent a golden opportunity to get in on the ground floor of a rapidly growing, dynamic company. Enzymatics offers competitive salaries and a stock participation plan for all employees. We will soon be relocating to the Philadelphia area. Please submit cover letter, resume and references to: **Personnel, ENZYMATICS, INC., Bldg H, Bethlehem Technology Center, S. Mountain Drive, Bethlehem, PA 18015.** An Equal Opportunity Employer

## Research Scientist (Neurochemist)

G.D. Searle is a worldwide leader in the pharmaceutical industry. Major new directions have recently been identified by the Department of Central Nervous System Diseases Research. An opportunity now exists for a qualified Research Scientist to join an active research program in the discovery of novel drugs for the treatment of CNS disorders.

Responsibilities include:

- Establishing and supervising a biochemical laboratory
- Investigating and defining the mechanism of action of novel compounds using biochemical and pharmacological methodologies
- Collaborating with other investigators in multidisciplinary research programs
- Participating as an integral member of project teams to determine research direction

The qualified candidate will have experience in radioreceptor binding and isolated tissue assays as means to pharmacologically characterize drugs. Experience in the measurement of neurotransmitters and intracellular messengers using HPLC and radioimmunoassay methods is desired. Required: Ph.D. in Biochemistry, Pharmacology or Physiology, with minimum 2 years postdoctoral experience. Must have record of publication demonstrating ability to undertake independent and creative research in the neurosciences.

This position offers excellent salary and benefits package and is located in a northern suburb adjacent to Chicago. Our location offers access to a variety of cultural and recreational facilities, several fine universities and an active neuroscience community. Qualified candidates may respond in strict confidence to: **G.D. Searle & Co., R & D, Professional Staffing, A-1, 4QA, 4901 Searle Parkway, Skokie, Illinois 60077.** An Equal Opportunity Employer.

**SEARLE**

## SENIOR RESEARCH VIROLOGIST

The LILLY RESEARCH LABORATORIES, a Division of Eli Lilly and Company, is seeking an established Senior Virologist to lead our antiviral research program.

The applicant should be an accomplished doctoral level virologist with a drug discovery orientation and proven track record. The position requires a scientist familiar with current tissue culture techniques and animal models, with a background well founded in molecular virology. Preference will be given to candidates having knowledge of clinical virology.

The Senior Virologist will be responsible for developing and implementing an innovative antiviral program. Broadly based scientific experience and good communication skills will be essential for leading our multi-disciplinary drug discovery group.

Qualified candidates should send their curriculum vitae to:



**John W. Crooks**  
**Manager, College Relations**  
**(SRV)**  
**Eli Lilly and Company**  
**Lilly Corporate Center**  
**Indianapolis, Indiana 46285**

Equal Opportunity Employer

**CHIEF, RETROVIRUS DISEASES BRANCH, Division of Viral Diseases, Center for Infectious Diseases, Centers for Disease Control (CDC).** Applications and nominations are invited for a scientist to serve as leader of a newly formed laboratory and epidemiology research unit in the Division of Viral Diseases. The Branch Chief directs and participates in a basic research program to develop better understanding of the human retroviruses, the diseases they cause, and the means for their control. M.D. degree required for Medical Officer or an earned doctoral degree is preferred (Ph.D. or equivalent), distinguished achievement in basic or applied research in retrovirology or retrovirus diseases, and demonstrated capacity for administrative leadership. For medically qualified persons, the salary range is \$52,347-\$70,800 and for non-medically qualified, \$45,763-\$69,976. The Branch has been newly formed and the new director is expected to build a strong research program which shall include non-AIDS as well as AIDS retrovirus related research. Diverse areas of research are encouraged as are collaborations with scientists in the other virological disciplines in the Division and Center.

Interested candidates should send a current curriculum vitae, and names of three professional references to:

**Sharlyn L. Wilkinson**  
**Personnel Management Office**  
**Centers for Disease Control**  
**1600 Clifton Road, N.E., 1-1058**  
**Atlanta, Georgia 30333**

Further information about the position can be obtained from:

**Carlos Lopez, Ph.D.**  
**Chairman, Search Committee**  
**Division of Viral Diseases**  
**Centers for Disease Control**  
**1600 Clifton Road, N.E., 7-206**  
**Atlanta, Georgia 30333**

*CDC is an Equal Opportunity Employer and provides a Smoke-Free Work Environment.*

## Senior Microbiologist (Infectious Disease Research)

The LILLY RESEARCH LABORATORIES, a division of Eli Lilly and Company, is seeking candidates for the position of Senior Microbiologist in the Department of Infectious Disease Research.

Applicants must have a doctoral degree. Postdoctoral experience is highly desirable. The applicant should have expertise in infectious disease research including an extensive understanding of the interaction between antimicrobial agents and pathogenic microorganisms. The Senior Microbiologist filling this position will establish a laboratory dedicated to the discovery and evaluation of novel modes of antimicrobial chemotherapy. Interdisciplinary cooperation with other investigators, such as medicinal chemists, enzymologists, physiologists, toxicologists, biochemists, immunologists, and physicians will be essential.

Qualified candidates should send their curriculum vitae to:



**John W. Crooks**  
**Manager, College Relations**  
**(SM/IDR)**  
**Eli Lilly and Company**  
**Lilly Corporate Center**  
**Indianapolis, Indiana 46285**

Equal Opportunity Employer

Applications are invited for a position of

## PROFESSOR OF BIOTECHNOLOGY

at the Institute for Biotechnology at the ETH Zurich.

Duties of the new professor will include teaching at undergraduate and graduate levels. In addition to the existing curriculum new courses may be introduced. In research cooperation with one or more of the existing groups working in gene technology, cell biology, process engineering and plant molecular biology is expected.

The successful candidate will have teaching experience and an outstanding research record in the area of gene expression using animal cell systems; experience with transgenic animals is desirable.

Applications with curriculum vitae and list of publications (no publications) should be directed before April 30, 1987, to the **President of the ETH Zurich, ETH-Zentrum, 8092 Zurich, Switzerland.**

## Senior Research Immunologist

To join a multidisciplinary team of biochemists, cell biologists, and pharmacologists seeking new therapeutic approaches for the control of autoimmunity and inflammation. The successful applicant will have primary responsibility for the design and development of novel animal models of inflammatory and immunologic disease processes. A Ph.D. in immunology or pharmacology and 2-3 years of postdoctoral experience is required. A strong background in biochemistry and *in vivo* models of inflammation is highly desirable.

## Staff Immunologist

To participate in a program on the development of therapeutic human monoclonal antibodies. A strong academic background (B.S. or M.S. degree) in such areas as biochemistry, cell biology, and immunology with experience in tissue culture, protein purification, and immunochemistry is preferred.

Merck Sharp & Dohme Research Laboratories are located in Rahway, New Jersey approximately 20 miles south of New York City. Our salaries, benefits, and growth potential are excellent. Interested candidates should specify which position they are applying for and submit their curriculum vitae and salary requirements to: **Ms. Alaina L. Love, Merck & Co., Inc., P.O. Box 2000, R80M-TL1, Rahway, New Jersey 07065.** Equal Opportunity Employer.



**Merck & Co., Inc.**

## Associate Scientist

### Bioanalytical Development Laboratory

Schering-Plough, a \$2.4-billion corporation, has established a worldwide reputation for leadership in the research, manufacture and marketing of pharmaceutical and personal care products.

We offer you an opportunity to join our Bioanalytical Laboratory research team to participate in the development of protein separation projects, including improving gel procedures. You will also provide technical support to department scientists and engineers.

This is a hands-on position, requiring in-depth knowledge of electrophoresis; iso-electric focusing; and protein blotting techniques.

Credentials must include an MS or BS in Biology, Biochemistry, or equivalent, plus 1-6 years' (depending on degree) laboratory experience in gel electrophoresis.

We offer an attractive salary and benefits package and a stimulating, highly supportive research environment. To explore this opportunity, forward your resume and salary history, in confidence, to: Ms. I. Connelly, Schering-Plough Corporation, 1011 Morris Avenue, Union, NJ 07083. We are an equal opportunity employer.



**Schering-Plough**

The Universities Space Research Association and  
The University of Maryland seek a  
**DIRECTOR**

for a

**CENTER OF EXCELLENCE IN  
SPACE DATA AND INFORMATION SCIENCES**

at the

**NASA/Goddard Space Flight Center**

Applications are invited for a Director to head a new research consortium of university, industry, and government computer scientists being established as a Center of Excellence in Space Data and Information Sciences at NASA's Goddard Space Flight Center in Greenbelt, Maryland. The Center of Excellence will be operated by the Universities Space Research Association, and the Director will hold a fully tenured faculty position in the Computer Science Department of the University of Maryland, College Park. The Center of Excellence will involve term-member researchers from leading university and industry computer science departments across the country through the use of high-bandwidth networks, in addition to supporting a resident and visiting research staff. The charter of the Center of Excellence will be to carry out state-of-the-art research on space data and information sciences in areas of potential long-term application to NASA programs in the space station era. Among the proposed thrusts for the Center of Excellence are the study of massive data base systems and architectures, image data compression, high speed on-line distributed data access systems, parallel processing applications, dynamic pattern recognition, expert data systems and natural querying languages, and automation and tele-robotics. The staff, including the university and industry members, will have access to NASA supercomputers, networks, parallel processors, data archives, image analysis systems, robots, etc.

**Qualifications:** The Center of Excellence will be the first research institution in the computer and information sciences to make extensive use of high band-width communication technology to link together its member faculty. We seek a dynamic and visionary scientist to lead this unique "telecenter". Applicants must be qualified for a tenured position in the Computer Science Department of the University of Maryland; must be knowledgeable in advanced data management and computational methods; and must have a demonstrated ability to lead collaborative research projects involving industry, university, and government. Salary and benefits are competitive and attractive and will depend on the individual's qualifications.

Apply no later than 15 May 1987 with complete resume on academic, professional, and personal data, including three references, to Dr. Robert Dorfman, Acting Dean, College of Computer, Mathematical, and Physical Sciences, Room 2300, Mathematics Building, University of Maryland, College Park, Maryland, 20742, (301) 454-4906.

*The University of Maryland and the  
Universities Space Research Association are  
Equal Opportunity Affirmative Action Employers*

## POSITIONS OPEN

### MYCOLOGIST/MOLECULAR SYSTEMATICS

Career position as a mycologist/molecular systematist with the Northern Regional Research Center, Agricultural Research Service (ARS), U.S. Department of Agriculture (USDA). Research concerns the systematics and genetic relationships of agriculturally important aspergilli and penicillia determined from comparisons of nucleic acids. The successful applicant will join a team of scientists in the ARS Culture Collection working on molecular systematics of various taxa. Graduate training and postdoctoral or equivalent experience in mycology and biochemistry/molecular biology are desirable. Some background in genetics is considered helpful. The Center provides relocation expense assistance. U.S. citizenship is required. Salary is commensurate with experience (GS 11-12, \$27,172 to \$42,341 per annum). For information on the research program, telephone: Dr. C. P. Kurtzman, 309-685-4011, extension 561. For application procedures and forms, telephone: Mrs. Helen Sweeney, 309-685-4011, extension 632. Applications in response to this advertisement should be marked 7N006 and must be received by 15 June 1987. Mail to: Helen Sweeney, Northern Regional Research Center, ARS, U.S. Department of Agriculture, 1815 North University Street, Peoria, IL 61604. The USDA is an Equal Opportunity/Affirmative Action Employer.

**IN VITRO FERTILIZATION.** Position for Ph.D. or M.S. in reproductive physiology, endocrinology, gamete biology to join AFS accredited, IVF Program. Responsibilities include clinical laboratory service and basic research with the potential for extramural funding. Send application, curriculum vitae, and references to: W. Paul Dmowski, M.D., Ph.D., Section of RE/I, Department of Obstetrics and Gynecology, Rush Medical College, 600 South Paulina, Chicago, IL 60612. Equal Opportunity Employer.

### PHARMACOLOGY FACULTY POSITION

The Department of Pharmacology and the Cancer Center of the University of Rochester invite applications for a tenure-track faculty position, which may be filled at the rank of ASSISTANT OR ASSOCIATE PROFESSOR. The successful applicant may hold a primary appointment in the Department of Pharmacology or joint primary appointments in the Department of Pharmacology and in the Cancer Center. Applicants should have a Ph.D. degree in pharmacology, biochemistry, physiology, or chemistry, or a related field, an M.D. degree, or both, postdoctoral research training, the potential to attract research support for an independent research program, and an interest in professional and graduate education. Applications are specifically sought from individuals with expertise in drug and chemical biotransformation and bioactivation, including chemical carcinogenesis, and who apply modern techniques of nuclear magnetic resonance spectrometry, mass spectrometry, cell and molecular biology, or physiology to their investigations. The deadline for applications is 8 May 1987. Applicants should forward curriculum vitae, a list of publications, three letters of recommendation or the names of three referees, and a summary of current and future research interests to: Search Committee, Department of Pharmacology, Box Pharmacology, School of Medicine and Dentistry, 601 Elmwood Avenue, Rochester, NY 14642. The University of Rochester is an Equal Opportunity Employer, and applications from women and from minority groups are encouraged.

**POSTDOCTORAL POSITIONS IN BIOCHEMICAL TOXICOLOGY.** Two positions are available immediately for Ph.D.'s with a strong background in biochemistry, organic or medicinal chemistry, drug metabolism, or pharmacology. Research projects under investigation deal with the biotransformation and bioactivation of xenobiotics with a special emphasis on the biosynthesis, physiological disposition, bioactivation, and cellular toxicity of amino acid S-conjugates. Candidates should send curriculum vitae, a brief statement of research experience, and the names of three references to: Dr. M. W. Anders, Department of Pharmacology, University of Rochester, 601 Elmwood Avenue, Rochester, NY 14642. Equal Opportunity Employer M/F.

## POSITIONS OPEN

**PLANT BIOLOGIST:** The College of Arts and Sciences of Widener University invites applications for a tenure-track position as Assistant Professor of Biology, beginning 1 September 1987. Ph.D. (botany or biology) is required. Undergraduate education is the primary emphasis of the position. Application review begins 1 April 1987. Letter of application, complete curriculum vitae, and three letters of reference should be sent to: Robert Morris, Biology Department, Widener University, Chester, PA 19013.

**POSTDOCTORAL ASSISTANT/INSTRUCTOR POSITION** available immediately in project using recombinant DNA and monoclonal methods to examine neural cell surface antigens [see Cole *et al.*, *J. Cell Biol.* 103, 1739-1744, (1986) and Williams *et al.*, *J. Cell Biol.* 101, 36-42, (1985)]. Experiments will utilize cell culture models to examine expression, regulation, and biologic function of both normal and in vitro mutagenized cDNAs. Experience in molecular biology, immunology, and/or cell culture preferred. Salary dependent on qualifications: minimum \$19,000. Appointment to faculty title series as Instructor possible for qualified applicants. Please send curriculum vitae, statement of interests, and names of three references to: Dr. Richard Akeson, Division of Basic Research, Room 629 IDR, Childrens Hospital Research Foundation, Cincinnati, OH 45229.

**POSTDOCTORAL FELLOW** to work with steroid receptors/receptor interactions with chromatin/steroid gene (oncogene) regulation. Research involves protein purification, antibody detection of receptors and chromatin protein, and some molecular biology (cloning and gene transcription analyses). Will train individuals not experienced in specific areas. Contact: Thomas C. Spelsberg, Ph.D., Department of Biochemistry and Molecular Biology, Mayo Clinic, Rochester, MN 55905. An Equal Opportunity/Affirmative Action Institution.

### POSTDOCTORAL FELLOW MOLECULAR NEUROBIOLOGY

**Howard Hughes Medical Institute, Massachusetts General Hospital:** Applications are invited from scientists, preferably with experience in molecular biology, to work on projects relating to the molecular biology of developing mammalian neurons. Specific projects concern identification of proteins related to growth cone function, investigation of their gene structure and regulation, and identification of their cellular mechanisms of action. Applications with curriculum vitae should be sent to: Dr. M. Fishman, Howard Hughes Medical Institute, Jackson 902, Massachusetts General Hospital, Boston, MA 02114.

### POSTDOCTORAL POSITION

Available after July 1987 for neurobiologists, biochemists, and molecular biologists interested in multidisciplinary investigations of the basic mechanisms underlying diseases of the nervous system. Applicants should send résumé and letters of recommendation to: Donald L. Price, M.D., Neuropathology Laboratory, The Johns Hopkins University School of Medicine, 509 Pathology Building, 600 North Wolfe Street, Baltimore, MD 21205-2182. Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITION:** Mechanism and enhancement of transdermal drug delivery. The objectives of this NIH-supported project (starting spring 1987) are (i) to characterize, using calorimetric and spectroscopic techniques, the biophysical and structural origins of the skin's permeability barrier, and (ii) to apply this information to the optimization of steroidal drug delivery. The program involves collaboration between the University of California, San Francisco (UCSF) and Pfizer Central Research. The appointee will conduct research, therefore, in both San Francisco and Groton, Connecticut. Applicants with strong backgrounds in biophysical, pharmaceutical, and/or biological chemistry are encouraged to apply by sending curriculum vitae and the names of two references to BOTH: Dr. Richard Guy, Departments of Pharmacy and Pharmaceutical Chemistry, UCSF, San Francisco, CA 94143, and Dr. Russell Potts, Pfizer Central Research, Groton, CT 06340. UCSF is an Equal Opportunity/Affirmative Action Employer.

## POSITIONS OPEN

**POSTDOCTORAL POSITION:** Seeking Ph.D. trained in sensory neurophysiology to participate in studies examining the contribution of sensory-limbic interactions to learning and memory. Experience in extracellular single-unit recording techniques and working knowledge of computer programming necessary. Send curriculum vitae, copies of relevant publications, and the names, addresses, and telephone numbers of three references to: Dr. J. E. LeDoux, Division of Neurobiology, Cornell University Medical College (CUMC), 411 East 69 Street, New York, NY 10021. CUMC is an Equal Opportunity Employer.

**POSTDOCTORAL POSITION—Massachusetts General Hospital and Harvard Medical School, Boston.** Postdoctoral position in immunology/biochemistry available on or after 1 July 1987 for qualified candidates with Ph.D. or M.D. degree; minimum term 2 years. Research involves structural and functional characterization of mutant antibody combining sites at protein and DNA level. Training includes immunochemistry, somatic cell fusion, protein and nucleotide sequence analysis, molecular biology in collaboration with interdisciplinary research group. Candidates should send their curriculum vitae, statement of research interests, and names of three references to: Dr. Michael N. Margolies, Massachusetts General Hospital, 15 Parkman Street, Boston, MA 02114. Telephone: 617-726-8552.

**POSTDOCTORAL POSITION** for experimental animal psychologist. To investigate drug interactions as evidenced by physiological conditioned responses (particularly heart rate) as well as effects on conditioned taste aversions (particularly their attenuation). Starting date flexible but prior to August 1987. Send applications to: Professor Sam Revusky, Department of Psychology, Memorial University of Newfoundland, St. John's, Newfoundland, Canada, A1B 3X9. Telephone 709-737-7584.

**POSTDOCTORAL POSITION** for 1 year available immediately to join a research team working on molecular approaches to study viral diseases. Experience in biochemistry, molecular biology, or cell biology required. Salary commensurate with qualifications and experience. Excellent fringe benefits. Send curriculum vitae, a brief summary of research interests, and three letters of reference to: Dr. Beatriz G. T. Pogo, Center for Experimental Cell Biology, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029. An Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION** is available from July 1987 for 3 years to study the neurobiology of specific glycolipid antigens involved in cell-cell interaction in the embryonic developing nervous system. A background in complex carbohydrate biochemistry, neurochemistry, and cell biology is preferred. Send curriculum vitae with names of three references to: Dr. Firoze B. Jungalwala, Department of Biochemistry, E. Kennedy Shriver Center for Mental Retardation, 200 Trapelo Road, Waltham, MA 02254.

**TWO POSTDOCTORAL POSITIONS** are available for work on aspects of ciguatera research. One position involves the development and improvement of techniques and procedures for growth, harvesting and extraction of toxic dinoflagellates and the rapid separation and purification of toxins using this layer, column, and high pressure liquid chromatography. Experience with culture of dinoflagellates is essential. The second position involves the electrophysiological investigation of the effects of marine toxins on isolated preparations, experimentation to develop new bioassay methods or systems for identification and quantitation of toxins and elucidation of the mechanism of action of the toxins. Experience with voltage clamp is essential and experience with NMR or HPLC is desirable. Twelve-month appointments are available with possibility of renewal. Applications including curriculum vitae and three reference letters should be sent to:

Dr. Donald M. Miller  
Department of Physiology  
Southern Illinois University at Carbondale (SIUC)  
Carbondale, IL 62901  
This project is funded by the federal government.  
SIUC is an Equal Opportunity Employer.



**MENARINI**, a leader in pharmaceutical research, is seeking an experienced, highly qualified **SCIENTIST** to fill a challenging top management position in its research department.

The successful candidate will be responsible for coordination of research programs at Menarini as well as its related companies and the development of relative research centers.

He will be assisted, whenever necessary, by internationally recognized experts, and free to select his collaborators. Adequate means will be provided to carry out research programs.

The research centers are located in Florence and Pomezia (Rome). Headquarters are located in Florence.

An attractive salary is offered commensurate to qualification and experience.

Menarini will also consider the hiring of qualified young scientists with experience in cardiovascular, CNS, endocrine, respiratory or genito-urinary areas.

Qualified candidates are requested to submit their curriculum vitae and a list of recent publications to:

**A. Menarini s.a.s.-Pharmaceutical Industries-  
Via Sette Santi, 3  
50131 Florence, Italy.**

## Molecular Geneticist

The Molecular Genetics Department of Pfizer Central Research has an immediate opening for a laboratory assistant. Applicants should possess a BS or MS in Molecular Genetics or related field and have experience in recombinant DNA methodology, preferably in yeast or *E. coli*.

You will be part of a small multidisciplinary team, carrying out exploratory projects. Duties will include gene cloning, expressing mammalian genes in yeast and radioisotope labelling of DNA.

In addition to a stimulating scientific environment, we also offer competitive compensation, benefit package and the opportunity to live in an attractive Connecticut shore community. Please send resume and description of research experience to: Lorraine C. Corr, Personnel Associate, Pfizer Central Research, Eastern Point Road, Groton, CT 06340.



An equal opportunity employer

## Ph.D RESEARCH SCIENTISTS

Through over 60 consecutive years of growth, Ayerst Laboratories, subsidiary of Fortune 100 American Home Products Corporation, has maintained its commitment to research.

Today, more than ever, we view research as the key to the future, the cornerstone for enhancing our strong position. To accommodate expanded research activity, we are seeking Ph.D. Research Scientists for positions in "neuropharmacology" and "drug metabolism".

### NEUROSCIENTISTS/CNS PHARMACOLOGIST

The successful candidate should possess a doctorate degree in neurobiology/pharmacology, with postdoctoral research experience and demonstrated strength in behavioral pharmacology and/or neurochemistry. This senior position is focused towards studying

the effects of anti-senility drugs on learning/memory performance in animals. A broad knowledge of CNS pharmacology is required. Strong communication and computer skills are necessary, as is the desire to be part of a multidisciplinary team drug discovery/research effort. RESPOND TO DEPT KK.

### DRUG METABOLISM

The successful candidate should have a Ph.D. in chemistry, pharmacology, pharmacy or biochemistry with approximately 2 years post-doctoral experience in drug metabolism and/or pharmacokinetics, the use of radioactive xenobiotics (carbon-14 and/or tritium), chromatographic techniques, and the analysis of drugs and their metabolites in biological fluids. Experience with laboratory animals and/or training in the purification and structure elucidation

of xenobiotic metabolites would be additional assets. RESPOND TO DEPT MC.

Ayerst offers an excellent salary and benefits package together with outstanding opportunities for career advancement. Our ultra-modern laboratory facilities are conveniently located in a picturesque central New Jersey setting.

Interested candidates should forward their curriculum vitae indicating their salary history and position of interest to:

### PERSONNEL MANAGER



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RESEARCH, INC.**

**CN800**

**Princeton, New Jersey 08543-9990**

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# Research

*...to build a better tomorrow*

GENETICS INSTITUTE, INC., located in Cambridge, MA, is a recognized leader in the field of biotechnology. Our research is committed to the development and application of recombinant DNA technology to human health care, agriculture, and chemicals. Recent expansion of our research and development efforts has created new opportunities:

## CELL BIOCHEMISTRY

We currently have an opening for a staff scientist to design and conduct research in the area of cell biochemistry. The ideal candidate will have a Ph.D. in Biochemistry or related field with a minimum of three years' post doc experience in cellular biochemistry with particular emphasis on the biochemical characterization of proteins and their interaction with cellular targets. As a member of a multidisciplinary team, the candidate will be expected to participate in the identification and research planning of new project areas. **Requisition # 256.**

## rDNA TECHNOLOGY DEVELOPMENT

An opening exists for a staff scientist to develop state-of-the-art technology in the area of rDNA research. The ideal candidate will have a Ph.D. in molecular biology with five years of relevant experience clearly demonstrating the ability to develop novel rDNA technology. **Requisition # 269.**

## PROTEIN CHEMISTRY

We have several openings for BS/MS level Research Associates who will join our structural Protein Chemistry Group which focuses on the biochemical characterization of recombinant DNA-derived proteins. Candidates should have a general background in either enzymology or protein biochemistry and a working knowledge of techniques utilized to examine protein structure such as SDS-PAGE, IEF, enzyme assays or HPLC of peptides and proteins. Individuals possessing specialized skills in areas such as amino acid analysis, HPLC peptide mapping or gas phase sequencing of proteins would be particularly well suited. **Requisition #482.**

## PROTEIN PHARMACEUTICS CHEMISTRY

We have an immediate opening for a research staff member to work in a rapidly growing group responsible for the formulation and stabilization of protein pharmaceuticals produced via recombinant DNA technology. A Bachelor's degree in biochemistry or related discipline is required, with subsequent work experience (0-5 years) preferably being in the area of physicochemical characterization of proteins and/or their purification. Knowledge of the theory and practice of a variety of methods used to examine the physical structure of proteins, such as HPLC, SDS-PAGE, fluorescence and CD spectroscopy, would be helpful. **Requisition #499.**

We offer a stimulating scientific environment in addition to a competitive salary, equity participation and comprehensive benefits package. Qualified candidates should forward their resume, in confidence, to Cindy Molnar, Employment Representative. Please refer to the appropriate Requisition # when applying for any of the above positions.

See our posting at the March FASEB meeting in Washington, D.C.

# Genetics Institute

87 CambridgePark Drive, Cambridge, MA 02140  
An Equal Opportunity/Affirmative Action Employer

## THE MACROPHAGE COMPANY, INC. EXCITING OPPORTUNITIES FOR QUALIFIED INDIVIDUALS

### The Company

The Macrophage Company, Inc. is developing cytotoxic factors from macrophages and human monocytes for treatment of cancer and other infectious and rheumatic diseases.

The Company will support a team of scientists at the Univ. of Texas System Cancer Center / M.D. Anderson Hospital and Tumor Institute who will use recombinant DNA and standard protein purification techniques to characterize and purify these factors.

### Postdoctoral Positions Available

The newly formed scientific team is seeking a protein chemist experienced in small and large scale modern bioseparation techniques (e.g., HPLC and immunoaffinity chromatography).

There is also a position for a molecular biologist who has experience in eukaryotic gene cloning techniques (e.g., cDNA library construction, subtraction hybridization, and sequencing).

Compensation for both positions will be commensurate with experience.

### Your Commitment

Qualified persons with a background or interest in immunology or willing to make a two year commitment to this exciting project should submit CV and references to:

Martin P. Sutter, President  
The Macrophage Company, Inc.  
2170 Buckthorne Place, Suite 350-A  
The Woodlands, TX 77380  
(713) 363-7145

## MEDICAL UNIVERSITY OF SOUTH CAROLINA POSTDOCTORAL FELLOWSHIPS IN CELL AND MOLECULAR PHARMACOLOGY

Fellowships are available for Ph.D., Ph.D./M.D. or M.D. candidates in an interdisciplinary environment of basic and clinical scientists studying the tissue specific expression and function of gene-protein systems pertinent to the design and actions of new cardiovascular and other drugs. Areas of particular interest include: calcium transport proteins in excitable tissues (G.E. Lindenmayer); cellular roles of kallikreins and kinins (H.S. Margolius, J. Chao, D. Miller); atriopeptins (M.G. Currie); thromboxane and other eicosanoid receptors (P.V. Halushka, D. Mais); hormones and cell structure (D.A. Baron); adenosine receptors in cardiac myocytes (W.H. Newman, J.G. Webb); neural and vascular amine transport and related proteins (T.E. Gaffney, P.J. Privitera, H.B. Daniell, E.E. Bagwell, J.G. Webb); analytical and synthetic chemistry of endogenous compounds and analogs (eicosanoids, peptides) with particular emphasis on high mass range mass spectrometry of proteins and high resolution 2D NMR of calcium binding proteins (D.R. Knapp, J. Oatis, J.J. Vrbanc, T. Williams, S. Martin); estrogenic and other regulatory mechanisms of hepatic P-450 isoenzymes (T. Walle); roles of red cell proteins in hemolytic events (D.J. Jollow, V.F. Price); mechanisms of steroid regulated gene expression (D. Kurtz).

Recent NIH and other grants for the above individuals include approximately \$7,500,000 for: individual research grants; construction of new molecular biology, hybridoma and cell culture laboratories; clinical research; and for the recruitment of additional cell and molecular biologists, chemists and other physical scientists interested in innovative approaches to therapeutic objectives.

Stipends for U.S. citizens or permanent residents funded through an NIH-supported training grant, and special stipends are available for other exceptional candidates via the College of Graduate Studies of the Medical University. Minority candidates are strongly encouraged to apply. Send resume, relevant transcripts and reprints, statement of research interests and names of three references to: **Dr. H.S. Margolius, Director, Postdoctoral Training Program, Department of Cell and Molecular Pharmacology and Experimental Therapeutics, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.** An Equal Opportunity Employer/Affirmative Action Employer.

## Senior Biomedical Information Scientist

The Medical Research Division of American Cyanamid Company is seeking an individual with a Ph.D. in a relevant life science to contribute to the interdisciplinary research, biomedical development and marketing efforts related to the biotechnology and cancer programs.

Responsibilities include conducting retrospective literature surveys using modern information retrieval systems and monitoring current published literature for important research advances.

Individuals with prior experience with on-line biomedical information retrieval systems, substantial knowledge of information resources and good communication skills will receive preferential consideration.

Competitive salary and liberal fringe benefits are offered in this desirable suburban location 30 miles from New York City. Please reply in confidence to: Ms. Maureen Quigley, Professional Employment Representative.



**American Cyanamid Company**  
Medical Research Division  
Lederle Laboratories  
Pearl River, NY 10965  
An Equal Opportunity Employer m/f

## HEAD PEPTIDE SYNTHESIS GROUP

**We** are a young, dynamic, research-driven, result-oriented company, recognized as a leader in the field of peptide synthesis. We are looking for an experienced solid-phase peptide chemist to lead our peptide synthesis group at our East coast location.

**You** have experience and in-depth familiarity with solid-phase peptide synthesis as well as with peptide purification. You will lead and direct a group of chemists and be responsible for development and production of new peptides.

Qualifications must include a Ph.D. and several years of working experience.

For fully confidential consideration, please send your resume to: **BOX 35, SCIENCE.**

A driving commitment toward research and development is a standard by which Abbott Laboratories has become a \$3.8 billion leader in the medical products industry. Our expanding pharmaceutical division is constantly exploring new areas of health care, developing products that are advancing the methods of treatment for a wide variety of disorders. Currently, we seek the following professionals:

### GROUP LEADER — CARDIOVASCULAR PHARMACOLOGY

The Cardiovascular Research Division has a position for a senior level pharmacologist with experience in the area of hypertension as it relates to drug discovery. The qualified candidate will be expected to lead a group of 5-7 professionals studying the role of atrial peptides and other pharmacological agents for the treatment of cardiovascular disease.

A Ph.D. specializing in pharmacology or physiology with 3+ years of experience relating to the action of antihypertensive agents is required. Candidates must possess extensive knowledge in areas of cardiac physiology, hemodynamics and renal function. A working knowledge of receptor pharmacology is desirable. **Reply to Job #1.**

### Ph.D. CARDIOVASCULAR PHARMACOLOGIST

An immediate opening exists in the Cardiovascular Research Division for a senior research pharmacologist with a minimum of 2 years postdoctoral experience. The candidate should possess a working knowledge of the cardiovascular system with an emphasis on the Adrenergic Nervous System. Experience in receptor pharmacology is desirable with some expertise on the role and utilization of adrenergic agents for the potential treatment of various disease states. **Reply to Job #2.**

### BS/MS PHARMACOLOGY RESEARCH ASSOCIATES

The individuals we seek will have at least two years postgraduate experience in conducting live animal hemodynamic experiments as well as good surgical skills and a familiarity with physiological recording techniques. A knowledge of computers and statistical data analysis is desirable. **Reply to Job #3.**

Recognized by Dun's Magazine as one of the nation's five best managed companies for 1986, Abbott is committed to excellence throughout the company. We provide an exceptional salary and benefits package, which includes profit sharing and stock retirement plan. And we're located in an attractive suburban area just 30 miles north of Chicago. **For confidential consideration, please send your resume with salary history, indicating job number, to: Patricia Handy, Dept. S/3-27.** Abbott is an Affirmative Action Employer.

**ABBOTT**  
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"HEALTH CARE WORLDWIDE" "

## National Institute of Mental Health

Alcohol, Drug Abuse, and Mental Health Administration  
Public Health Service

### NEUROSCIENCES RESEARCH BRANCH

#### Centers for Neuroscience and Schizophrenia Program

**Position Title:** Coordinator, Centers for Neuroscience and Schizophrenia Program.

**Grade and Salary:** GM 13-14; \$38,727-59,000. Candidates may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service.

**Location:** National Institute of Mental Health, 5600 Fishers Lane, Rockville, MD.

**Qualifications:** Ph.D. in a neuroscience discipline plus direct experience in the conduct of neuroscience research, and/or M.D. degree with clinical experience in psychiatric disorders and direct experience in the conduct of neuroscience research.

**Responsibilities:** The NIMH Centers for Neuroscience and Schizophrenia (CNS) program will provide for development and support of research centers which combine basic neuroscience research with clinical studies of schizophrenia. The program will fund major research efforts, either at single institutions or multiple, geographically separate institutions. The coordinator will be responsible for planning, developing and administering the program.

**Further Information on Program or Position:** Dr. Ronald Schoenfeld  
NIMH, Room 11-105  
5600 Fishers Lane  
Rockville, MD 20857  
(301) 443-1504

**Further Information on Application Procedures/ or Submit SF-171 to:** J. Harris, Personnel Specialist  
5600 Fishers Lane, Room 15 C-18  
Rockville, MD 20857  
(301) 443-4826

*NIMH IS AN EQUAL OPPORTUNITY EMPLOYER*

## PHARMACEUTICAL

## CLINICAL RESEARCH

### Join our expanding team!

Stuart Pharmaceuticals, a division of ICI Americas Inc. is one of the nation's fastest growing pharmaceutical companies. During the past decade, we have tripled our sales, increased our product lines, and continued to develop new drugs in our expanding research facility. To keep pace with this growth, we need clinical research professionals with proven experience for the following career positions:

• **Biostatistician**—MS in Biostatistics or Applied Statistics. Knowledge of computer applications, SAS and statistical software are a must. (Respond to Job #50)

• **Sr. Clinical Programmer Analyst**—BS in Business, Computer Science or Life Science. Must be proficient in the use of SAS and have experience supporting clinical research efforts. (Respond to Job #51)

• **Clinical Systems Analyst**—MS in Biological Sciences or Computer Science plus knowledge of NDA process and 3-5 years' clinical systems experience. (Respond to Job #52)

• **Clinical Programmer**—BS in Computer Science, Life Science, Business, or Math and programming experience. SAS knowledge preferred. (Respond to Job #53)

• **Clinical Research Associate**—BS in Biosciences or Nursing plus experience in clinical research. Must be available for travel. (Respond to Job #54)

• **Clinical Data Associate**—BS in Bioscience, experience in data analysis and computer operations. (Respond to Job #55)

We offer highly competitive salaries, comprehensive benefits including a unique investment plan and opportunity for future professional and financial growth.

Please submit resume and salary history to Manager, Professional Employment. On the envelope, please indicate the Job # to which you responded.



### Stuart Pharmaceuticals

A division of ICI Americas Inc.

Wilmington, DE 19897

Equal Opportunity Employer, M/F

## Universiteit van Amsterdam

The University of Amsterdam seeks for the Laboratory of Environmental and Toxicological Chemistry applicants for the position of

## professor of environmental chemistry (m/f)\*

Vacancynumber S. 2224.

*This position requires the candidate to:*

- teach courses at both BSc and MSc level and hold seminars in Environmental Chemistry
- conduct, stimulate and coordinate research in Environmental Chemistry; present research topics of the department including the behaviour of chlorinated aromatic compounds in the environment
- participate in the administration and organisation at departmental and (sub)faculty level
- manage grant and research contract acquisition.

*The candidate will be expected to have:*

- a strong teaching record
- a distinguished research background proven by a PhD thesis and various publications
- considerable organising qualities.

The candidate is expected to have a good command of the Dutch language within two years of the appointment.

Gross salary depends on age and experiences and ranges from Dfl. 6,854.- to Dfl. 9,495.- per month (Dutch Civil Servants Code).

Persons interested should send their curriculum vitae, including a list of publications, quoting vacancynumber - within 3 weeks - to the Chairman appointments Committee, Prof. Dr. H. Poppe, vakgroep Analytische Chemie, Nieuwe Achtergracht 166, 1018 WV Amsterdam, the Netherlands.

*\*Women in particular are invited to apply.*

# Research Scientists

**A Responsive Research Environment**

**Pioneer new applications  
in Biotechnology,  
Pathology and Pharmacology  
for Cardiovascular & CNS Research.**

As a research-driven company, Schering-Plough can offer you the project responsibility, support and recognition to stimulate your best ideas. Joining us in one of these new positions, you'll be part of an expanding group of bold thinkers. At the forefront of some of today's most significant breakthroughs in cardiovascular and CNS research.

**□ Cardiovascular Pharmacology**

**SR. BIOCHEMIST**—Your background must include experience with growth factor receptor binding methods and cell proliferation as well as familiarity with tissue culture and related atherosclerosis research techniques.

**SR. BIOCHEMIST**—Experience in the regulation and measurement of lipoproteins and cholesterol in serum and tissues is required, as is understanding of the latest information on lipoprotein metabolism.

**SR. EXPERIMENTAL PATHOLOGIST**—Requires expertise in histological evaluation of the blood vessel wall in atherosclerosis.

**SR. VASCULAR BIOLOGIST**—You must have a strong background in the cellular physiology of the blood vessel wall in atherosclerosis and thorough familiarity with vascular cell culture techniques.

**SR. PHARMACOLOGIST/PHYSIOLOGIST**—Your expertise must encompass experimental animal

models of atherosclerosis and evaluation of drug effects on atherosclerotic processes in vivo.

**□ CNS Pharmacology**

**SR. CNS BIOCHEMIST**—You must have comprehensive knowledge of the application of fundamental methods to new drug discovery. Preference will be given to candidates with a background in any of the following: radioreceptor binding assays, HPLC and RIA assays for neurotransmitters and second messengers (cAMP and PI), enzyme kinetic techniques, and central dopaminergic and cholinergic pharmacological systems.

Candidates for all positions must have a Ph.D., or equivalent, and 0–5 years' experience within the area of interest. The ability to communicate and produce results in an interdisciplinary environment is essential.

**ASSISTANT/ASSOCIATE PHARMACOLOGISTS** (9 positions)—In addition to the above positions, Schering-Plough is accepting resumes for Assistant/Associate Scientists, to complement the Senior positions listed above. For these positions, interviews will not begin until June or July of this year.

We offer a competitive salary and outstanding benefits. Please send detailed resume, indicating position of interest, to: Louis DeMartino, Schering-Research, 60 Orange Street, Bloomfield, NJ 07003. We are an equal opportunity employer.



**Schering-Plough**



## POSITIONS OPEN

### POSTDOCTORAL POSITIONS

National Institutes of Health  
National Institute of Allergy and  
Infectious Diseases  
Laboratory of Persistent Viral Diseases  
Rocky Mountain Laboratories

Positions available to study pathogenesis of viral diseases, with particular emphasis on infections of the CNS or hemopoietic system. Models currently being studied include rabies, murine, equine, and human retroviruses, Aleutian mink disease, and the scrapie agent. Approaches include use of molecular biology, genetics, and immunology. Applicants must have less than 3 years professional level relevant postdoctoral research experience and have completed their Ph.D., M.D., D.V.M., or equivalent degree. Beginning salaries range from \$20,000 to \$23,000. Submit curriculum vitae, bibliography, and names of three potential references to:

Dr. Bruce Chesebro, Chief  
Laboratory of Persistent Viral Diseases  
Rocky Mountain Laboratories  
Hamilton, MT 59840  
*An Equal Opportunity Employer.*

### POSTDOCTORAL POSITION IN DEVELOPMENTAL BIOLOGY

A position is available to study the biochemistry and cell biology of rodent trophoblast cells. Background in protein chemistry and immunological techniques is desirable. Send curriculum vitae and the names and addresses of three references to:

Dr. Michael J. Soares  
Department of Physiology  
University of Kansas Medical Center (KUMC)  
Kansas City, KA 66103  
*KUMC is an Affirmative Action/Equal Opportunity Employer*

### POSTDOCTORAL POSITION IN NEUROBIOLOGY

Available in the Department of Pharmacology, St. Louis University School of Medicine, St. Louis, Missouri. This NIH-funded project will use single electrode voltage-clamp recordings from neurons within intact autonomic ganglia to study the role of neuroactive peptides in avian oculomotor neurotransmission. The applicant must have a strong background in intracellular electrophysiological techniques, and experience with voltage-clamp is preferred. Send curriculum vitae along with names of three references to: Vincent A. Chiappinelli, Ph.D. (on sabbatical leave until September, 1987) at MRC Molecular Neurobiology Unit, University of Cambridge Medical School, Hills Road, Cambridge CB2 2QH, Great Britain. *St. Louis University is an Equal Opportunity Employer. M/F/V/H.*

**POSTDOCTORAL POSITION, YEAST MOLECULAR GENETICS/GENE EXPRESSION**, available immediately. Recombinant DNA methods are being used to characterize the DNA binding protein which activates transcription of the maltose fermentation genes in the *Saccharomyces* yeasts. The work involves mutant isolation, DNA-protein binding studies, antibody preparation and DNA sequencing. Experience in molecular genetics is required. Salary range is \$18,000 to \$20,000 (plus benefits), depending upon experience. Please send curriculum vitae, copies of relevant reprints and names of references to: Dr. Corinne A. Michels, Department of Biology, Queens College of the City University of New York, Flushing, NY 11367.

**RESEARCH PROGRAMMER** needed to modify, document, develop production codes, and to evaluate algorithms for scientific applications. Initial assignment will be in molecular modeling and dynamics of biopolymers. Experience in this field or in supercomputer use is a plus. Wide scientific interest, good communication skills, and graduate degree required. Submit résumés to: John Andrews, Computer Center m/c 135, University of Illinois at Chicago, Chicago, IL 60680-4348. *Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

**POSTDOCTORAL POSITION** available September 1987 for a **BIOCHEMIST, CELL BIOLOGIST**, or **DEVELOPMENTAL BIOLOGIST** to study cellular adhesion and membrane proteins as cellular determinants. The project will include isolation, purification, and structural analysis of glycoproteins contributing to adhesion of cells in sea urchin embryos. Contact: Dr. Merrill B. Hille, Department of Zoology NJ-15, University of Washington, Seattle WA 98195. Telephone: 206-543-5781.

**POSTDOCTORAL POSITION** available for work on the pathogenesis of neurodegenerative and seizure disorders. Experience with modern biochemical and/or (immuno)histochemical techniques essential. Background in the neurosciences desirable. Starting date on or after 1 July 1987. Send résumé and names of at least three references to: Robert Schwarcz, Ph.D., Maryland Psychiatric Research Center, P.O. Box 21247, Baltimore, MD 21228.

**POSTDOCTORAL POSITION** to study the cellular and molecular biology of the neuronal cytoskeleton, with emphasis on expression of microtubule-associated proteins in brain. Work will involve isolation and analysis of cDNA, in situ hybridization, and neuronal cultures. Applicants should have a Ph.D. and background in molecular biology. Experience in neuroscience, or tissue culture is useful. The position carries a Harvard Medical School appointment and is for 3 years beginning in April 1987. Send curriculum vitae to: Dr. Itzhak Fischer, Department of Biochemistry, E. K. Shriver Center, 200 Trapelo Road, Waltham, MA 02254.

**POSTDOCTORAL POSITION** to study the molecular biology of cell adhesion proteins and their receptors. The project will focus on new approaches to understanding morphogenesis. While experience is desirable, we will gladly train an interested individual in recombinant DNA, solid phase peptide synthesis, and biophysical methods. Send summary of research, curriculum vitae, and references to: Dr. Robert J. Klebe, Department of Cellular and Structural Biology, University of Texas Health Science Center, San Antonio, TX 78284. *An Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

**POSTDOCTORAL POSITION**—available immediately to study the immunosuppressive activity of *Staphylococcal Exotoxins*. Positions exist for research dealing with both immunoregulatory cell activity as well as fundamental protein biochemistry. Send curriculum vitae and three letters of reference by 10 May 1987 to: Dr. Thomas J. Rogers, Associate Professor, Department of Microbiology and Immunology, Temple University School of Medicine, 3400 North Broad Street, Philadelphia, PA 19140. *Equal Opportunity Employer.*

### POSTDOCTORAL POSITION IN MOLECULAR BIOLOGY

To study the biochemical regulation and interactions of the *c-src* protooncogene product. Studies include recombinant DNA, tissue culture, and protein analysis techniques. Relevant experience is desirable. Contact: Dr. David Shalloway, Department of Molecular and Cell Biology, The Pennsylvania State University, Room 406 South Frear, University Park, PA 16802. *Equal Opportunity/Affirmative Action Employer.*

### POSTDOCTORAL POSITION AVAILABLE

Position available immediately to study the structures of damaged DNA and of DNA repair and recombination enzymes, the action mechanisms of the repair enzymes using electron microscopy and genetic engineering techniques. Molecular biology background is required. Send application to: Drs. Jack Griffith and Aziz Sancar, University of North Carolina School of Medicine, Department of Biochemistry 231H, Chapel Hill, NC 27514. *Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION** available to investigate the role of purine receptors in respiratory control in the newborn rat. Experience in small animal surgery, brain anatomy, and knowledge of receptor biochemistry is desirable. A Ph.D. in pharmacology or physiology is preferred. The yearly salary is \$18,000 for a period of 2½ to 3½ years starting June 1987. Send curriculum vitae and three letters of reference to: Dr. H. Ronald Zielke, Pediatric Research, University of Maryland, 655 West Baltimore Street, Baltimore, MD 21201. *An Equal Opportunity/Affirmative Action Employer.*

# Environmental Professionals

## The Savannah River Plant Offers Two Clear Advantages: Career Challenge And Our Location In Aiken, South Carolina

Operated by Du Pont for the United States Department of Energy, the Savannah River Plant produces radioactive isotopes for national defense, medicine, and America's space program. While this outstanding environment broadens your professional horizons, our Aiken, South Carolina location provides access to some of the Southeast's most attractive cultural and recreational resources. Positions are available for:

### Air Quality Engineer

MS/PhD in Meteorology or Engineering, with emphasis on air quality protection, plus a minimum of 2 years experience. Position requires keeping up-to-date on regulations and new technologies in air quality monitoring to provide for implementing air quality protection plans.

### Aquatic Ecologist

MS/PhD in Aquatic Ecology/ Biology, as well as 3 or more years experience, including NPDES permitting, biomonitoring studies and bioassay testing. Assignments would include developing resource management programs for surface waters and wetlands, and coordinating regulatory compliance activities.

These positions may require physical activity such as climbing ladders and the use of respiratory protective equipment. U.S. CITIZENSHIP REQUIRED.

Salary is commensurate with your training and experience. Our highly regarded benefits program includes relocation assistance. For confidential consideration, please send resume, indicating position of interest, to: K.L. Mays, Employee Relations Department, Room X50654, Du Pont Company, Wilmington, DE, 19898.



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## APPLICATION SCIENTIST

### Main Responsibilities:

Training of and technical support to customers in the use of a microscope - based medical image analysis system.

Must have experience and knowledge in the use of computers (preferably IBM PC) and background in biology or laboratory medicine. Some understanding of imaging science preferred. Excellent interpersonal skills required. Moderate travel.

Negotiable starting salary depending on qualifications. Please send your resume in confidence to:

**Yvonne V. Isaacs**  
Personnel Department



**CELL ANALYSIS SYSTEMS**  
261 Eisenhower Lane South  
Lombard, IL 60148

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## PAC BIO

Pacific Biotechnology Ltd. is a newly formed Australian joint venture between California Biotechnology Inc. and the Garvan Institute of Medical Research. Pac Bio will be located in Sydney and will primarily be concerned with the development of new human therapeutics for diseases of aging, especially cardiovascular disease, osteoporosis and inflammatory disorders. The company will focus on techniques of modern molecular and structural biology and chemistry.

Applications are invited from scientists at all levels in any of the following research areas to fill a variety of new positions:

Receptor cloning and biochemistry

Synthesis of peptide analogues

X-ray crystallography

NMR spectroscopy

Computer modelling

Organic chemistry

Pac Bio intends to commence operations in mid-1987. Interested candidates should send a resume and names of two references to: California Biotechnology, Inc., Human Resources Department, Attn: MF:ebp, 2450 Bayshore Parkway, Mountain View, CA 94043. We are an equal opportunity employer.

## CHAIR, DEPARTMENT OF ANATOMICAL SCIENCES

**City University of  
New York Medical School**

Applications and nominations are invited for the Chair of a new Department of Anatomical Sciences at CUNY Medical School. The School has a special obligation to emphasize the significant emerging role of primary care as well as to increase the number of physicians in underrepresented minorities in the nation's physician pool and to enhance the availability of medical services to underserved areas.

Candidates should be recognized as outstanding in research, have strong teaching credentials and have administrative strengths. Salary competitive and commensurate with experience. Please send letters of application or nomination, curriculum vitae and the names, telephone numbers and addresses of three references by May 1, 1987 to: **Dr. Meir Lev, Chair, Search Committee for Anatomical Sciences, City University of New York Medical School**



**CITY COLLEGE OF CUNY**  
Convent Av & 138 St  
New York, NY 10031

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## RETROVIRAL RESEARCH

The Basic and Applied Science division of Bionetics Research, Inc. is seeking a qualified Ph.D. level Scientist and experienced Technicians to support its efforts in the basic research and development of diagnostic tools, vaccines and therapeutic agents for HTLV-III and related human retroviruses.

**SCIENTIST II/III**— Molecular virology, Ph.D. in Molecular Biology or Biochemistry with a minimum of two years experience in recombinant DNA techniques including expression of retroviral genes.

**SENIOR LABORATORY TECHNICIANS**— Propagation of retroviruses, tissue culture, immunological and biochemical procedures for characterization of retroviral proteins. MS/BS in Biology, Immunology or Biochemistry with two or more years experience.

Bionetics Research, Inc. is located in suburban Washington, D.C. and prides itself in offering a comprehensive benefits package, which includes 401(K) Savings Plan with company matching funds, health, life and dental insurance paid for employees and competitive salaries.

Please send Curriculum Vitae including salary history to: Human Resource Office-Pos. A, BIONETICS RESEARCH, INC., 1330-A Piccard Drive, Rockville, Maryland 20850. BRI is an Equal Opportunity Employer. All applications welcomed.

 BIONETICS RESEARCH, INC.

## POSITIONS OPEN

**POSTDOCTORAL POSITION** available immediately to study initiation of DNA replication in eukaryotic cells. A newly developed technique is being used to identify and characterize chromosomal replication origins in yeast and *Drosophila*, and to explore the relationship between replication and transcription in these organisms. Proteins involved in initiation of replication are also being identified and characterized. A competitive salary is offered. Please send curriculum vitae and have three letters of recommendation sent before 1 May 1987, to: **Dr. Joel A. Huberman, Department of Molecular and Cellular Biology, Roswell Park Memorial Institute, Buffalo, NY 14263. Telephone: 716-845-3047.** *An Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION:** Available spring 1987, **University of California, San Francisco (UCSF).** To study the structure and function of polypeptide hormone receptors. Requires background and interest in protein purification, immunology, and peptide chemistry. Experience with HPLC and hybridoma techniques preferred. Send curriculum vitae and names of three references to: **Dr. Carl Grunfeld, Metabolism Section (111F), VA Medical Center, 4150 Clement Street, San Francisco, CA 94121.** *UCSF is an Equal Opportunity/Affirmative Action Employer; women and minorities are encouraged to apply.*

## GLYCOPROTEIN/CARBOHYDRATE BIOCHEMIST

**POSTDOCTORAL POSITION** available for person trained in glycoprotein and/or carbohydrate biochemistry (particularly chromatographic methods for sugars, oligosaccharides, and glycopeptides) to participate in ongoing research concerning the role of protein glycosylation in photoreceptor membrane morphogenesis and retinal degenerations. Send curriculum vitae, recent reprints, and names of three references to: **Dr. Steven J. Fliesler, Bascom Palmer Eye Institute, University of Miami School of Medicine, P.O. Box 016880, Miami, FL 33101.**

## POSITIONS OPEN

**POSTDOCTORAL POSITION** available immediately to study the molecular biology of novel calcium-binding proteins in African trypanosomes. An interest in cellular regulatory pathways and some experience with recombinant DNA techniques is desirable. Send curriculum vitae to: **Dr. Larry Ruben, Department of Biology, Southern Methodist University, Dallas, TX 75275.** *Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION** now available for person experienced in recombinant DNA technology or biochemistry. Opportunity to participate in study of transmembrane signal transduction involving phosphoinositides. Send curriculum vitae and names of three references to: **Dr. O. Hayes Griffith, Institute of Molecular Biology, University of Oregon, Eugene, OR 97403.** *UO is an Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION** available immediately to study the regulation of enzymes which mediate stimulus-response coupling in mammalian cells. Projects include the purification, cloning, and expression of mammalian intracellular phospholipases and studies on the transcription, translation, and intracellular processing of these enzymes. Candidates should be recent Ph.D.'s with experience in molecular biology and/or protein chemistry. Send curriculum vitae and two letters of recommendation to: **R. W. Gross, M.D., Ph.D., Box 8020, Washington University, St. Louis, MO 63110.**

## POSTDOCTORAL POSITION HEPATIC MEMBRANE TRANSPORT

Postdoctoral position available for NIH-funded project involving characterization and isolation of hepatic membrane proteins mediating bile acid and calcium transport. Applicant must have recent Ph.D. and previous experience in vesicle transport or protein purification techniques. Send curriculum vitae and names of three references to: **Bennett L. Blitzer, M.D., Liver Study Unit, University of Cincinnati College of Medicine, 231 Bethesda Avenue (Room 6560), Cincinnati, OH 45267.**

## POSITIONS OPEN

### POSTDOCTORAL POSITION IN ENDOTHELIAL PATHOPHYSIOLOGY

Available immediately for 2 to 3 years, to study the behavior and responses of endothelial cells from various sources under conditions of tissue culture, as part of ongoing studies on micro- and macro-vascular pathology. Candidates should have a Ph.D. in cell biology or biochemistry, and experience in tissue culture. Please send curriculum vitae and names of three references to: **Dr. Guido Manjo, Department of Pathology, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, MA 01605.** *The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer.*

### POSTDOCTORAL—RESEARCH ASSOCIATES.

Several positions are available with negotiable starting dates to join an integrated and ongoing research program on growth factors and their mechanism of actions. We are seeking candidates with training in one of the following areas: (i) Pharmacology experience in experimental designs for effector and inhibitor for receptor binding. (ii) Immunology experience in RIA/ELISA and methods to purify mono-polyclonal antibodies. (iii) Peptide and protein chemistry. Please send curriculum vitae and inquiry to: **James Tam, Rockefeller University, Box 294, 1230 York Avenue, New York, NY 10021.** *An Equal Opportunity Employer.*

**POSTDOCTORAL RESEARCH ASSOCIATE.** Positions are now available to join a multidisciplinary group studying the structure and regulation of the genes for the catecholamine neurotransmitter biosynthetic enzymes. Applicants should have a strong background in either recombinant DNA technology or neurochemistry/neuropharmacology. Send curriculum vitae, statement of research interest, and the names of three references to: **Dr. Barry B. Kaplan, Molecular Neurobiology Program, Western Psychiatric Institute and Clinic, University of Pittsburgh School of Medicine, Pittsburgh, PA 15213.**

## Postdoctoral Fellow/Scientist

California Biotechnology Inc., a rapidly growing biotechnology company engaged in the development of diagnostic and therapeutic products is seeking an outstanding individual to join its Molecular Genetics group.

Qualified candidates must have a Ph.D. and 0-2 years postdoctoral experience in the fields of Molecular Biology, Human Genetics and Statistics. The applicant will have demonstrated scientific creativity and ability to interact well with others.

We offer a stimulating research environment with a competitive compensation and benefits package. For consideration please forward curriculum vitae and names of three references in confidence to: California Biotechnology Inc., Human Resources, Dept. MF-PF, 2450 Bayshore Parkway, Mountain View, CA 94043. An equal opportunity employer.

**CAL  BIO**

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## OPPORTUNITIES AT BOEHRINGER MANNHEIM

Boehringer Mannheim is a rapidly growing leader in the field of medical diagnostics and biochemicals. This leadership has been attained through emphasis on quality and team effort and it's Bohringer Mannheim's employees that are responsible for growth and leadership. Due to this growth, we are currently seeking qualified individuals for exceptional opportunities in the following areas:

### RESEARCH INVESTIGATOR — TEST DEVELOPMENT

Will coordinate and conduct research and development of clinical chemistry diagnostic tests in novel formats from initial laboratory experiments through scale-up and evaluation to transfer into production. Requirements include a PhD or equivalent experience in Biochemistry, Chemistry or related area and proven research and development experience in test development preferably in an industrial setting. Effective oral and written communication skills and supervisory skills are also essential.

### RESEARCH INVESTIGATOR — ANALYTICAL

Responsibilities include developing specifications and analytical procedures for characterization of raw materials and finished products with regard to their composition, reactivity, enzyme activities and stability. Also will coordinate and develop in process quality control procedures. A PhD in Analytical Chemistry, Biochemistry or equivalent and knowledge of a wide variety of analytical instrumentation is required. Effective oral and written communication skills and supervisory skills are also essential. Expertise with polymers would be a definite plus.

### RESEARCH INVESTIGATOR — TECHNOLOGY DEVELOPMENT

Will conduct research in new technologies directed toward test development in novel formats. Will also provide an interface between test development scientists and engineers to develop instruments and equipment to bring new technologies on line. A PhD in Chemistry, Biochemistry, Physics or an MS in Chemical Engineering or equivalent experience is required. Effective oral and written communication skills are also essential. Experience with film technology is a definite plus.

### RESEARCH INVESTIGATOR — IMMUNOASSAY DEVELOPMENT

Will coordinate and conduct research and development of immunodiagnostic tests in novel formats from initial laboratory experiments through scale-up and evaluation to transfer into production. Requirements include a PhD or equivalent experience in Biochemistry, Chemistry or related area and proven research and development experience in test development, preferably in an industrial setting. Effective oral and written communication skills and supervisory skills are also essential.

### SCIENTISTS

These positions will support the above personnel with requirements including B.S. or M.S. in Biology, Chemistry, Biochemistry, Immunochemistry or Analytical Chemistry and at least one year of applicable R&D experience.

At Boehringer Mannheim we offer an exciting and challenging work environment as well as an excellent compensation and benefit program including a 401K. If you meet the above requirements and would like to join an organization that is a leader in its field, we invite you to send your resume with salary history to:

HUMAN RESOURCES  
BOEHRINGER MANNHEIM  
Department S • P.O. Box 50100  
9115 Hague Road • Indianapolis, IN 46250

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## BASIC AND APPLIED BIOMEDICAL SCIENTISTS AND TECHNICIANS

The Bionetics Research, Inc. Internal Research and Development Program is expanding its biotechnology initiatives related to diagnostic products and cancer vaccines. We seek individuals at the Ph.D. and MS levels with established credentials to support these on-going projects. Experience applicable to one or several of the following areas is required:

**Monoclonal Antibody**—generation against tumor antigens using hybridoma fusion techniques.

**Cancer Biology/Immunology**—related to the immunopharmacology of lymphokines.

**Immunohistochemical/Fluorescence**—methodology to evaluate monoclonal antibody tissue reactivity using Radiobinding or ELISA methods.

**Molecular Biology**—research in genetics of gene expression in *E.coli* Eukaryote gene cloning. Development and application of expression vectors, construction and analysis of cDNA and genetic libraries and DNA cloning and chemistry.

**Biochemistry**—protein sequencing, amino acid analysis, protein purification and characterization.

**Diagnostic Immunology**—using monoclonal antibodies for bacterial and viral pathogens and cancer antigens.

**Monoclonal Antibody**—production and purification in large scale, using ascites production as well as *in vitro* methods.

**Radioiodination Chemistry**—using <sup>125</sup>I to label proteins and small molecules (cAMP), and to design RIA procedures.

These are attractive opportunities for scientists and technicians interested in basic research, biotechnology, and technology transfer.

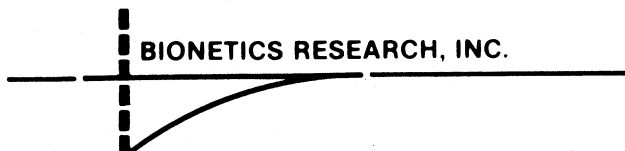
Comprehensive compensation package includes paid medical/life/dental insurance premiums for employee, and 401(K) savings plan with company matching funds.

Please send Curriculum Vitae, including salary requirements in confidence to:

Human Resource Department—Science  
BIONETICS RESEARCH, INC.  
1330-A Piccard Drive  
Rockville, Maryland 20850

BRI is an Equal Opportunity Employer.  
All applicants welcomed.

BIONETICS RESEARCH, INC.



## POSITIONS OPEN

**POSTDOCTORAL POSITION IN IMMUNO-BIOLOGY OF CANCER.** Ribi ImmunoChem Research, Inc., Hamilton, Montana, has immediately available a postdoctoral position to perform basic and fundamental studies regarding immunobiology of cancer. Applicants should have previous experience with tumor-associated antigens, therapy of tumors in experimental animals, immunoassays and analysis of immune response data. The beginning salary is \$20,000 for 1 year and may be extended for a maximum of one additional year if approved by the research staff and management. Motivated and creative individuals soon to be awarded or holding recent Ph.D., M.D., D.V.M., or equivalent degrees are invited to apply. Send curriculum vitae and list of three references to: **Dr. John L. Cantrell, Chief of Immunology, Ribi ImmunoChem Research, Inc., P.O. Box 1409, Hamilton, Montana, 59840, telephone 406-363-6214. An Equal Opportunity Employer.**

### POSTDOCTORAL POSITION TUMOR VIROLOGY

Available immediately, we have recently discovered RNA covalently bound to SV40 Tag and to the oncogene product p53. The RNAs, the bonding, and the possible significance to oncogenic transformation will be studied. U.S. citizenship or residency required, funding through NIH training grant. Send curriculum vitae and names of three references to:

**Dr. Robert Carroll  
Department of Pathology  
New York University Medical School  
550 First Avenue  
New York, NY 10016**

**POSTDOCTORAL/RESEARCH ASSOCIATE** to work on the immunogenetics of the acute leukemias in rapidly expanding Medical Center. Project involves some knowledge of Clg and Raji cell assays, agarose block electrophoresis, SDS-polyacrylamide gel electrophoresis, and electroblotting (Western blot). Experience with monoclonal antibodies desired. Work would involve close collaboration with molecular biologist and hematologist. Send curriculum vitae, and three letters of reference to: **Dr. Harold R. Schumacher, Department of Pathology, 2160 South First Avenue, Loyola University Medical Center, Maywood, IL 60153. Loyola University is an Equal Opportunity Employer.**

**LABORATORY/HEMATOLOGY FELLOWSHIP.** Loyola University Medical Center of Chicago is establishing a new program in laboratory hematology for pathologists Board-certified in AP and CP. Internists and pediatricians with comparable Boards interested in more in-depth training in hematology will be considered. The program will be broad based and directed toward subspecialty Board certification with training in coagulation, peripheral blood analysis, and bone marrow pathology during the first year. The second year will be devoted primarily to research. Interested candidates should send a curriculum vitae and names of references to: **Dr. Harold Schumacher, Professor and Chief of Hematology, Department of Pathology, Loyola University Medical Center, 2160 South First Avenue, Maywood, IL 60153. Loyola University is an Equal Opportunity Employer.**

Individuals with doctorate degree, background and experience in metallothionein, immunochemistry, and molecular biology are being sought to fill two **POSTDOCTORAL RESEARCH ASSOCIATE POSITIONS.** Send curriculum vitae, a statement of career goals, and three letters of recommendation to: **Dr. M. Ebadi, Professor and Chairman, Department of Pharmacology, University of Nebraska College of Medicine, 42 Street and Dewey Avenue, Omaha, Nebraska 68105. Affirmative Action/Equal Opportunity Employer.**

**POSTDOCTORAL/SENIOR RESEARCH ASSOCIATE** position available immediately to study protein sorting in the nervous system. Studies will utilize a multidisciplinary approach to examine cellular and molecular mechanisms responsible for the delivery of proteins by fast axonal transport. Candidates should have a strong background in protein chemistry and/or molecular biology. This opportunity offers potential advancement into a permanent independent staff position. Send curriculum vitae and names of three references to: **Dr. George Stone, Division of Molecular Biology, Nathan Kline Institute, Orangeburg, NY 10962. Equal Opportunity Employer M/F.**

## POSITIONS OPEN

**POSTDOCTORAL RESEARCH POSITION** available in the laboratory of an NIH-trained investigator interested in complement, cellular immunoregulation, and leukocyte metabolism. Experience in cellular and biochemical techniques, protein chemistry, monoclonal development, and/or ELISA techniques is preferred but not essential. Send curriculum vitae to: **Dr. Chaim Brickman, Center for Cell Biology, Sinai Hospital of Detroit, 6767 West Outer Drive, Detroit, MI 48235-2899.**

### RECEPTORS AND G-PROTEINS

An opportunity for **POSTDOCTORAL TRAINING** will become available July 1987 in a group investigating the cell biology, biochemistry, and molecular biology of cell-surface receptors and the G-proteins to which they are linked. Ph.D. or M.D. required, experience germane to these pursuits highly desirable. Send curriculum vitae and names of three references to: **Dr. C. C. Malbon, Department of Pharmacology, Health Science Center, SUNY/Stony Brook, Stony Brook, Long Island, NY 11794-8651.**

**RESEARCH ASSISTANT:** Sloan-Kettering Institute. We seek a qualified individual for a biomedical technical support position to participate in projects which focus on the development of anti-cancer therapies utilizing a multidisciplinary approach. Extensive hands-on experience in molecular biology is essential; a thorough working knowledge of biochemistry a must. B.S./B.A., plus 3 years of relevant bench research experience required. We offer an excellent compensation package, a state-of-the-art working environment, and an excellent opportunity for career development. Please send résumé to: **E. L. Kleinert, Personnel Department #060, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. An Equal Opportunity Employer, M/F/H/V.**

### RESEARCH ASSOCIATE

Employer seeks person with Ph.D. in electrical engineering and 2 years of experience to direct advanced research on fast-structured algorithms for statistical signal processing. Required: a thorough knowledge of the theory of non-stationary lattice-filter models and their role in linear estimation, filter synthesis, inverse scattering, adaptive filtering, and computational algebra, as well as a deep understanding of network theory, matrix theory, and systolic array implementation. Salary \$52,000 per annum. Job site: Stanford. Send this ad and a résumé to: **Job number CW1278, P.O. Box 9560, Sacramento, CA 95823-0560 not later than 13 April 1987.**

**RESEARCH ASSOCIATE** available for a Ph.D. in physiology/cell biology to join a group studying the cellular regulation of transport processes in airway epithelia. Applicants must have experience in either quantitative fluorescence microscopy or electrophysiology and should be willing to master both techniques. Inquiries to: **Dr. C. William Davis, Division of Pulmonary Diseases, University of North Carolina, Chapel Hill, NC. Telephone 919-966-2531. An Equal Opportunity/Affirmative Action Employer**

**RESEARCH ASSOCIATE** position available immediately to study the regulation and enzymology of sphingolipid synthesis. Ph.D. in biochemistry with 3 years of postdoctoral experience in sphingolipid analysis required. Some experience in microbiology preferred. Salary \$22,000 per year, 40 hours per week. Apply to: **Dr. M. Lev, Associate Dean for Basic Sciences, City University of New York, Medical School, 138 Convent Avenue, New York, NY 10031. An Equal Opportunity/Affirmative Action Employer.**

### RESEARCH ASSOCIATE POSTDOCTORAL FELLOW

Research associate/postdoctoral position available immediately to join multidisciplinary group engaged in insulin growth factor action. Project involves purification and characterization of growth factor-stimulated P-tyr proteins. Strong background in monoclonal antibodies and experience with protein peptide purification required. Protein microsequencing, oligonucleotide and peptide synthesis available via adjacent core laboratory. Send curriculum vitae and three letters of reference to: **J. Avruch, Chief, Diabetes Unit, Massachusetts General Hospital, Boston, MA 02114 or telephone: 617-726-6909.**

## POSITIONS OPEN

The University of Adelaide South Australia invites applications from both women and men for a **RESEARCH ASSOCIATESHIP** available immediately for up to 2 years in the **DEPARTMENT OF BIO-CHEMISTRY**, at the Waite Agricultural Research Institute. A molecular biologist is required to work on a project funded by a grant under the Australian Research Grants Scheme to analyze the molecular structure of a plant chromosome. The study will concentrate on chromosome 1 of rye using wheat/rye addition lines. The work involves the use of recombinant DNA techniques and other DNA analysis procedures in conjunction with cytogenetic and cell culture methods.

Applicants should hold a Ph.D. degree and have experience in molecular biology or genetics.

Further information may be obtained from: **Dr. P. Langridge, Department of Agricultural Biochemistry, (08) 372 2368.** Annual salary: A\$24,013 × 5 to A\$27,507.

Applications in duplicate, quoting reference number 4697, giving personal particulars (including whether candidates hold Australian permanent residency status), résumé, and names and addresses of three referees should reach: **The Registrar, University of Adelaide, GPO Box 498, Adelaide, South Australia, 5001, Telex UNIVAD AA 89141 not later than 20 April 1987. The University is an Equal Opportunity Employer.**

### RESEARCH PSYCHOLOGIST SUNNYBROOK MEDICAL CENTRE TORONTO, CANADA

Sunnybrook Medical Centre is an 1180-bed University of Toronto teaching hospital with major programs in Trauma, Oncology, Diseases of the Aging, and Mental Health. The Medical Centre is located on 200 acres of parkland in the heart of Metropolitan Toronto.

Sunnybrook seeks an academic psychologist with primary responsibility for the promotion of research within the Department of Psychiatry. It is expected that the candidate selected will receive a cross appointment to the University of Toronto.

Apply to:

**Dennis J. Egan  
Chairman, Search Committee  
Sunnybrook Medical Centre  
2075 Bayview Avenue  
Room C-1430  
Toronto, Ontario M4N 3M5**

## AMERICAN BIOGENETICS

### RESEARCH SCIENTIST

**American Biogenetics Corporation**, specializing in the genetic engineering and biodesign of microorganisms which produce specialty chemicals, has a position available for a highly motivated **MICROBIAL/YEAST GENETICIST/PHYSIOLOGIST.** The successful applicant must possess a Ph.D. and have at least 2 years of postdoctoral training.

American Biogenetics Corporation offers a challenging and creative working environment, and excellent opportunities for personal and scientific development, and is located in a desirable coastal area of southern California.

Send curriculum vitae and the names of three references to: **Robert Little, Ph.D., American Biogenetics Corporation, 19732 MacArthur Boulevard, Suite 130, Irvine, CA 92715, no later than 24 April 1987.**

### RESEARCH SCIENTISTS BIOGROWTH, INC.

BioGrowth, a new biotechnology company, has openings for the following scientists:

**MOLECULAR BIOLOGIST, Ph.D.,** with 2 years of additional experience in developing mammalian expression systems including retroviral and dhfr-amplifiable vectors.

**MOLECULAR BIOLOGIST, B.S./M.S.,** with 2 additional years of lab experience including cDNA library construction, mRNA preparation/translation, DNA/RNA sequencing, and expression vector construction. BioGrowth, located in new facilities in the San Francisco Bay area, offers competitive salaries, benefits, and the opportunity to make a major contribution at a newly developing company. Please send your résumé, salary history, and list of three references to: **BioGrowth, Inc., Department MB-1, 3065 Atlas Road, Suite 117, Richmond, CA 94806.**



# SCIENTISTS

Genentech, Inc., a leader in the field of Biotechnology, seeks highly motivated Scientists with demonstrated records of accomplishment for the following positions:

## **Process Research & Development**

Working in tandem with an expert team of biochemists and biochemical engineers, you'll help develop and scale up methods for the purification/characterization of recombinant proteins and peptides to be used in human pharmaceuticals and animal health care products. Specific focus areas will include recovery processes and rapid protein isolation/characterization, therefore knowledge of HPLC, FPLC, affinity and other protein purification/analysis techniques is essential. Strong interest in immunochemistry, and the ability to think creatively are also required assets.

Successful candidate will have a PhD in Biochemistry/Biochemical Engineering and at least 2 years relevant postdoctoral experience in academia or industry. (#JG-2033)

## **Biological Chemistry**

Your responsibility will be to investigate basic mechanisms of action of relaxin and other proteins at the molecular and cellular level, as well as develop cell-based assays which reflect these bioactivities. Cell biology and biochemistry background with experience in cell culture and receptor binding techniques required. Background experience with immunoassay development and protein receptor purification highly desirable.

Successful candidate will have PhD in Cell Biology or related field and at least 2 years related experience in academia or industry. (#JG-2006)

## **Medicinal & Analytical Chemistry**

Position will supervise the testing and release of new products for clinical trials. The candidate we seek will have creative abilities in protein/peptide characterization, and the expertise to establish and implement final product specs. This position also involves writing scientific reports in support of IND submissions, so excellent communications skills are essential.

Successful candidate will have a PhD in Biochemistry or related field and at least 2 years related experience in academia or industry. Pharmaceutical experience highly desirable. (#JG-1351)

## **Postdoctoral Fellow Biochemical Endocrinology**

A Postdoctoral Fellow in Biochemical Endocrinology is sought to participate in several projects including the elucidation of growth hormone, relaxin and inhibin mechanisms of action. A background in physiology or second messenger biochemistry would be helpful. (#1920SW)

Genentech, Inc. offers an excellent salary and benefits package coupled with the opportunity to make a significant contribution to our organization. Please send resume, indicating position title and number, to Human Resources Department, Genentech, Inc., 460 Point San Bruno Boulevard, South San Francisco, CA 94080. An equal opportunity employer.



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## POSITIONS OPEN

**RESEARCH INORGANIC RADIOCHEMIST:** Ph.D. and/or equivalent experience in inorganic chemistry of actinide elements and radiochemical procedures for separation and determination of actinides. Strong background and experience in classical inorganic research (not analytical chemistry) required and in electrochemistry desirable. Salary: \$32,000 to \$38,000. Only U.S. citizens apply. Send letter and form SF-171 to: **Kay Gilbert, Personnel Office, U.S. Geological Survey, MS 203, Box 25046, Lakewood, CO 80225.** *The Federal Government is an Equal Opportunity Employer.*

**RESEARCH SCIENTIST.** Design and construction of specialized and complex electronic and optical instruments for use in basic research on photosynthesis, and in biological oceanography; including the interface of the instruments to existing instruments, and associated software development. Forty hours, 8:30 a.m. to 5:00 p.m. \$2915.67 per month. Doctorate. Major field of study—biophysics, 2 years of experience in fluorescence theory and detection and instrumentation techniques. **Job Order No. 0603301, D.O.T. Code 023061014.** Résumé to: **NYS Job Service, 55 Medford Avenue, Patchogue, NY 11772.** *Equal Opportunity Employer M/F.*

**SENIOR RESEARCH SCIENTIST, GLYCOPROTEIN BIOCHEMIST,** full-time research position available for scientist (Ph.D. or M.D.) with expertise in the biosynthesis of extracellular matrices with emphasis on basement membranes. Experience in cell biology techniques would be valuable. The successful candidate will join a renal research group, with interests in renal metabolism and biochemical alterations in diabetes. Applicants must have a publication track record, grantsmanship abilities, and be capable of independent research. Salary (\$35,000 to \$50,000 per year) is assured for a 2- to 3-year period and will be commensurate with credentials. Please send curriculum vitae, publications list, past and present grant support information, and other supportive material to: **Mr. David Shepherd, Division of Nephrology and Hypertension, Clara Ford Pavilion 5, Henry Ford Hospital, 2799 West Grand Boulevard, Detroit, MI 48202.** Telephone: 313-876-2709.

### STAFF RADIATION THERAPIST

The University of Michigan Medical School, Department of Radiation Oncology, has an opening for a clinical radiation therapist to work in a community hospital in southeastern Michigan. This individual will be responsible for consulting with and evaluating patients, prescribing treatment, and supervising the administration of that treatment. This will be a non-tenured position, rank will depend on qualifications and experience. Interested persons should send curriculum vitae to: **Allen S. Lichter, M.D., Chairman, University of Michigan Medical Center, Department of Radiation Oncology, 1500 East Medical Center Drive, UH-B2C490/0010, Ann Arbor, MI 48109-0010.** *The University of Michigan is an Equal Opportunity/Affirmative Action Employer. PCN 15.*

### T-CELL CULTURISTS/IMMUNOLOGIST LAB SUPERVISOR

**Massachusetts General Hospital, Boston**—Seeks a senior level technologist who has extensive experience in T-cell culture as well as immunology. You will be responsible for coordinating all technical activities of the laboratory. Requirements: 3 to 5 years of direct immunology research, plus M.S. in biology, biochemistry, or biotechnology.

Call, or send résumé to:

**Harold Gregory  
Employment Service Office  
Massachusetts General Hospital  
15 Fruit Street  
Boston, Massachusetts 02114  
Telephone: 617-726-2205**

*We are an Equal Opportunity/Affirmative Action Employer.*

**BIOLOGY: TENURE-TRACK POSITION,** September 1987. Teach general biology, microbiology, bacteriology, and genetics. Appreciation of the Liberal Arts philosophy is important. Interest in interdisciplinary activities, student advising, and faculty committee work is expected. Ph.D. preferred. Send curriculum vitae and three letters of reference by 20 April 1987 to: **Dr. L. N. Stauffer, Biology Department, Drury College, Springfield, MO 65802.**

## POSITIONS OPEN

The Registry of AIDS Pathology, American Registry of Pathology, an Equal Opportunity Employer, invites immediate applications from **RESEARCH SCIENTISTS AND TECHNICIANS** for virology and molecular biology section. Candidates for scientist position must have a Ph.D. or M.D. and appropriate research experience. Preference will be given to applicants with experience in cell and virus culture, immunoassays, particle isolation and purification, and molecular cloning. Depending on previous experience, annual salary to \$34,000 for scientists and \$23,000 for technicians plus fringe benefits. Submit résumé by 15 April 1987 to: **Box 34, SCIENCE.**

## CONFERENCES

### INTERNATIONAL CONFERENCE ON REPRODUCTION AND HUMAN CANCER 11 to 13 May 1987

The National Cancer Institute and the National Institute of Child Health and Human Development are sponsoring an **International Conference on Reproduction and Human Cancer** in Bethesda, Maryland, 11 to 13 May 1987, to focus on the effects of cancer and its treatment on reproduction, including possible genetic effects.

The purpose of the conference is to draw together knowledge and research leaders from multiple disciplines, such as medical, pediatric, and radiation oncology; obstetrics and gynecology, endocrinology, epidemiology, pharmacology, psychiatry, genetics, and teratology; and reproductive, mutation, and radiation biology.

CME credits applied for. For additional information telephone: **Ms. Mary E. Clark at 301-589-6760.**

### RADIONUCLIDES IN THE FOOD CHAIN

A conference entitled "Radionuclides in the Food Chain" will be held 1 to 5 November 1987 at the **Laxenburg Conference Center near Vienna, Austria.** The program is being sponsored by the International Life Sciences Institute (ILSI) in association with the International Institute of Applied Systems Analysis. For more information and registration materials, contact: **Lili C. Merritt, ILSI, 1126 16th Street, NW, Washington, DC 20036;** telephone: 202-659-0074.

## COURSES

### SOCIETY FOR NEUROSCIENCE SHORT COURSE: COMPUTATIONAL NEUROSCIENCE JUNE 4 to 6, 1987 AT THE UNIVERSITY OF SOUTHERN CALIFORNIA, LOS ANGELES, CA

This course is intended for graduate students and more advanced neuroscientists who wish to understand the relevance of computational neuroscience to their research, and to learn the techniques of computational neuroscience. Topics and faculty: *Single neuron structure and function:* C. Koch (Cal Tech), J. Moore (Duke), J. Rosenberg (Glasgow); *Perception:* M. Arbib (USC), E. Schwartz (NYU), T. Sejnowski (Johns Hopkins); *Motor control:* C. Atkeson (MIT), D. Hartline (Hawaii), D. Robinson (Johns Hopkins).

Enrollment limited to 40; registration fee \$100. Low-cost accommodation is available on the USC campus; information will be provided to registrants.

For information and application form: **Society for Neuroscience, 11 Dupont Circle, NW, Washington, DC 20036.**

## PROGRAM

### CAREER CHANGE OPPORTUNITY

This unique program offers the candidate with a doctorate-level degree in science the opportunity to earn the doctor of optometry (O.D.) degree in 2 calendar years. Employment opportunities exist in private practice, industry, education, and research. Contact: **Dr. D. M. Chauncey, Ph.D.-O.D. Program Director, The New England College of Optometry, 424 Beacon Street, Boston, MA 02115;** telephone: 617-266-2030, extension 147.

## ANNOUNCEMENTS

### ANNOUNCEMENT

**TEACHING POSITIONS** at **Jordan University of Science and Technology, Irbid, Jordan.** The Faculty of Public Health and Allied Health Sciences invites applications for posts of professor, associate professor, and assistant professor in the specialties of: environmental health, epidemiology, nutrition, virology, diagnostic endocrinology, instrumental analyses, and health administration. Candidates must hold a Ph.D. degree or equivalent and have experience in teaching and research. Applicants should write, enclosing résumé not later than 17 April 1987 to: **Employee's Affairs Department, Jordan University of Science and Technology, Irbid, Jordan.**

## FELLOWSHIPS

**POSTDOCTORAL FELLOWSHIPS** (M.D. or Ph.D.) for advanced training involving basic and clinical research of relevance to biological psychiatry available from the Mental Health Clinical Research Center for Affective Disorders at the University of Pittsburgh. \$16,000 to \$23,000 annually, commensurate with experience. Applications for fall 1987 fellowships should be received before 15 April 1987 and include curriculum vitae, statement of research interests, and three letters of recommendation. Contact: **Ms. Hermi Rojahn, Western Psychiatric Institute and Clinic, E-1213, 3811 O'Hara Street, Pittsburgh, PA 15213.**

### POSTDOCTORAL FELLOWSHIPS FOR RESEARCH IN NEUROPLASTICITY AND REGENERATION

Positions are available after July, 1987 for interdisciplinary studies in neuroplasticity and regeneration. The program is sponsored by the Departments of Neuroscience, Neurology, Neurosurgery, and Otolaryngology at the University of Virginia School of Medicine. Current research interests of the participating faculty focus on the neural mechanisms involved in CNS injury and disease and neuromuscular disorders. Participating faculty include **J. Bennett, E. Lohman, L. Heimer, J. A. Jane, Y. I. Kim, N. J. Lenn, W. B. Levy, O. Steward, and G. F. Wooten.** Applicants should hold either the Ph.D. or M.D. degree, and should be committed to a career involving research. We are particularly interested in clinically trained individuals with a commitment to basic research. Address inquiries to:

**Oswald Steward, Ph.D.  
Neuroplasticity and Regeneration Training Program  
Department of Neuroscience, Box 230  
University of Virginia School of Medicine  
Charlottesville, VA 22908**

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

### LUPUS RESEARCH SCHOLAR AWARD PROGRAM

**Terri Gotthelf Lupus Research Institute** invites applications and nominations for five scholarships available 1 July 1988.

The purpose of this program is to support research training at the postdoctoral level in various aspects of clinical and experimental systemic lupus erythematosus research.

Candidates with a Ph.D. or M.D. degree, having U.S. citizenship or residence, are eligible to apply. A candidate must be nominated by a scientist in whose laboratory the proposed research will be conducted.

The award is for a period of 3 years, in the amount of \$90,000.

The deadline for filing is 15 August 1987. Information and specific application requirements are available upon written request only from:

**Terri Gotthelf Lupus Research Institute  
Administrative Office  
50 Washington Street  
South Norwalk, CT 06854**

**PHARMACOLOGY AND TOXICOLOGY FELLOWSHIPS:** Fellowships are available leading to the Ph.D. degree. Stipends range from \$7,000 to \$10,000 plus full tuition remission. Department offers a wide variety of research projects. For further information contact: **Dr. Leonard Waite, Department of Pharmacology and Toxicology, University of Louisville, Louisville, KY 40292.**



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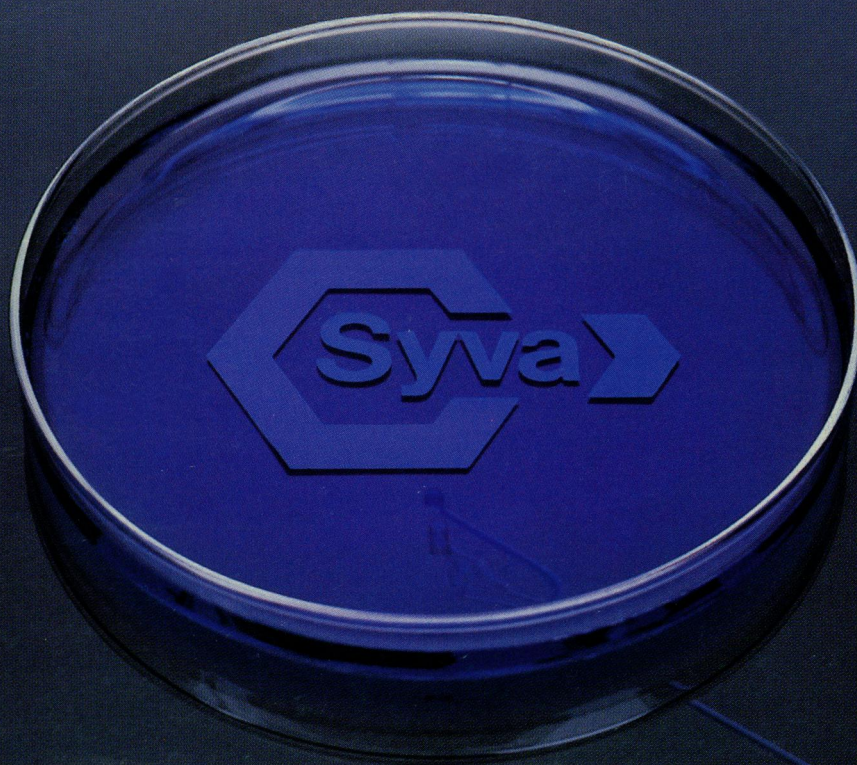
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