

big science—the fish worrying about the effect on the food chain of a strike by the plankton, the hunter-gathers who now “usually eat out.” The book closes with a drawing of the universe prior to the Big Bang.—K.L.

Newton's Dream. MARCIA SWEET STAYER, Ed. Published for *Queen's Quarterly* by McGill-Queen's University Press, Montreal, 1988. vi, 135 pp., illus. \$19.95. Based on lectures, Kingston, Ontario, 1987.

This book stems from a commemoration of another book—Newton's *Principia*. In 1987, as part of the Canadian celebration of the *Principia's* tercentenary, a series of public lectures were delivered in Kingston, Ontario, by “distinguished visiting scholars in science, the social sciences, and the humanities” who “examined the impact of Newton's thought from a variety of perspectives.” The reception accorded the lectures led to this effort to make them available to a wider audience. In all there are eight lectures. The first four deal directly with Newton's work and its influence. Richard Westfall discusses the *Principia* as related to the Scientific Revolution generally, attempting to correct popular misconceptions thereof, and W. H. Newton-Smith expounds the development of the concept of scientific rationality stemming from Newton's work, questioning the validity of the concept as delimiting “some special and privileged form of rationality.” D. D. Raphael examines the influence of Newton, complemented by that of Hume, on Adam Smith, and in a more biographical essay A. P. French traces the development of Newton's own thought. The remaining lectures take up more recent concerns. Werner Israel traces the evolution of the concept of black hole, which “may well be as old as the theory of gravitation” though the name dates back only to 1967. Stephen Smale, in considering “the Newtonian contribution to our understanding of the computer,” is critical of the “idea of the computer as a finite instrument” as embodied in the Turing machine and suggests “a different model for computer theory based on the idea of using real numbers.” Steven Weinberg discusses “Newton's dream”—to understand all of nature . . . through principles of physics that could be expressed mathematically—as a motivation of 19th-century chemistry and 20th-century physics. Denys Wilkinson concludes the volume with a consideration of symmetry, proceeding from a discussion of such examples of broken symmetry as Chartres Cathedral and the famous bust of Queen Nefertiti to a consideration of issues of symmetry in elementary particle physics.—K.L.

Books Received

Advances in Turbulence. William K. George and Roger Arndt, Eds. Hemisphere, New York, 1989. xii, 234 pp., illus. \$60. From a symposium, Minneapolis, MN, June 1986.

AIDS. Pathogenesis and Treatment. Jay A. Levy, Ed. Dekker, New York, 1989. xxiv, 632 pp., illus. \$99.75. Immunology Series, vol. 44.

America's Neighborhood Bats. Merlin D. Tuttle. University of Texas Press, Austin, 1988. viii, 96 pp., illus. \$19.95; paper, \$9.95. A guide to “understanding and learning to live in harmony with them.”

Atlas of Entomopathogenic Fungi. Robert A. Samson, Harry C. Evans, and Jean-Paul Latgé. Springer-Verlag, New York, and Bunge, Utrecht, 1988. xii, 187 pp. \$89.50.

Attitudes and Behavioral Decisions. Arnold Upmeyer, Ed. Springer-Verlag, New York, 1988. xii, 268 pp., illus. \$49. Springer Series in Social Psychology.

Basic Concepts of Chemistry. Leo J. Malone. 3rd ed. Wiley, New York, 1989. xxii, 682 pp., illus. \$42.50.

Basic Statistics. Tales of Distributions. Chris Spatz and James O. Johnston. 4th ed. Brooks/Cole, Pacific Grove, CA, 1988. xvi, 395 pp., illus. \$35.25.

Carbohydrate Chemistry. John F. Kennedy, Ed. Clarendon (Oxford University Press), New York, 1988. xii, 678 pp., illus. \$150.

Cell Interactions in Visual Development. S. Robert Hilfer and Joel B. Sheffield, Eds. Springer-Verlag, New York, 1988. xii, 175 pp., illus. \$75. Cell and Developmental Biology of the Eye. From a symposium, Philadelphia, PA, Oct. 1987.

Characterizations and Analysis of Block Designs. A. K. Nigam, P. D. Puri, and V. K. Gupta. Wiley, New York, 1988. viii, 176 pp. \$24.95.

Chemical Structure Software for Personal Computers. Daniel E. Meyer, Wendy A. Warr, and Richard A. Love, Eds. American Chemical Society, Washington, DC, 1988. xiv, 107 pp., illus. \$49.95; paper, \$39.95. ACS Professional Reference Book.

Chemistry of High-Temperature Superconductors II. David L. Nelson and Thomas F. George, Eds. American Chemical Society, Washington, DC, 1988. xii, 338 pp., illus. \$64.95. ACS Symposium Series, vol. 377. From a symposium, Los Angeles, CA, Sept. 1988.

Crystallization and Polymorphism of Fats and Fatty Acids. Nissim Garti and Kiyotaka Sato, Eds. Dekker, New York, 1988. x, 450 pp., illus. \$180. Surfactant Science Series, vol. 31.

Current Issues in Neural Regeneration Research. Paul J. Reier, Richard P. Bunge, and Fredrick J. Seil, Eds. Liss, New York, 1988. xx, 410 pp., illus. \$76. Neurology and Neurobiology, vol. 48. From a symposium, Pacific Grove, CA, Dec. 1987.

Down by the River. The Impact of Federal Water Projects and Policies on Biological Diversity. Constance Elizabeth Hunt with Verne Huser. Island Press, Washington, DC, 1988. xx, 266 pp., illus. \$34.95; paper, \$22.95.

The Early Universe. Facts and Fiction. G. Börner. Springer-Verlag, New York, 1988. xiv, 439 pp., illus., + plates. \$69. Texts and Monographs in Physics.

Ecology and Human Organization on the Great Plains. Douglas B. Bamforth. Plenum, New York, 1988. xiv, 217 pp., illus. \$29.50. Interdisciplinary Contributions to Archaeology.

Effective Writing Strategies for Engineers and Scientists. Donald C. Woolston, Patricia A. Robinson, and Gisela Kutzbach. Lewis, Chelsea, MI, 1988. xvi, 181 pp., illus. \$24.95.

Elastic and Diffractive Scattering 2. K. Goulianos, Ed. Editions Frontières, Gif sur Yvette, 1988. xxii, 386 pp., illus. \$45. From a conference, NY, Oct. 1987.

Erich F. Schmidt's Investigations of Salado Sites in Central Arizona. The Mrs. W. B. Thompson Archaeological Expedition of the American Museum of Natural History. John W. Hohmann and Linda B. Kelley. Museum of Northern Arizona Press, Flagstaff, 1988. xviii, 251 pp., illus. Paper, \$14.95. Museum of Northern Arizona Bulletin no. 56.

The Evolution of Sex. Robert Bellig and George Stevens, Eds. Harper and Row, San Francisco, 1988. x, 202 pp., illus. \$19.95. From a conference, St. Peter, MN, 1987. Lectures by John Maynard Smith, Lynn Margulis and Dorion Sagan, Peter H. Raven, William Donald Hamilton, Sarah Blaffer Hrdy, and Philip J. Hefner.

Explanation and Experiment in Social Psychological Science. Realism and the Social Constitution of Action. John D. Greenwood. Springer-Verlag, New York, 1989. xvi, 264 pp. \$35.

Fish and Their Behavior. Gunther K. H. Zupanc.

Tetra, Melle, F.R.G., 1988 (U.S. distributor, Tetra Sales, Morris Plains, NJ). iv, 187 pp., illus. \$12.95.

Flora of New Zealand. Freshwater Algae, Chlorophyta, Desmids. Vol. 2. Hannah Croasdale and Elizabeth A. Flint. Botany Division, Department of Scientific and Industrial Research, Christchurch, 1988. x, 147 pp. + plates. NZ\$57.50.

Flow and Transport in the Natural Environment. Advances and Applications. W. L. Steffen and O. T. Denmead, Eds. Springer-Verlag, New York, 1988. viii, 384 pp., illus. \$69. From a symposium, Canberra, Australia, Sept. 1987.

Foragers and Farmers. Population Interaction and Agricultural Expansion in Prehistoric Europe. Susan Alling Gregg. University of Chicago Press, Chicago, 1989. xx, 275 pp., illus. \$24.95; paper, \$9.95. Prehistoric Archeology and Ecology.

Free Energy Transduction and Biochemical Cycle Kinetics. Terrell L. Hill. Springer-Verlag, New York, 1989. x, 119 pp., illus. Paper, \$27.

Functionalism Historicized. Essays on British Social Anthropology. George W. Stocking, Jr., Ed. University of Wisconsin Press, Madison, 1988. vi, 244 pp., illus. \$25; paper, \$12.95. History of Anthropology, vol. 2. Reprint, 1984 ed.

Fundamental Metallurgy of Gas-Shielded Arc Welding. N. M. Novozhilov. Gordon and Breach, New York, 1988. x, 400 pp., illus. \$129. Translated from the Russian edition (Moscow, 1979) by N. Standen.

Fundamental Processes of Atomic Dynamics. J. S. Briggs, H. Kleinpoppen, and H. O. Lutz, Eds. Plenum, New York, 1988. xii, 693 pp., illus. \$120. NATO Advanced Science Institutes Series C, vol. 181. From an institute, Maratea, Italy, Sept.-Oct. 1987.

The Heterosexual Transmission of AIDS in Africa. Dieter Koch-Weser and Hannelore Vanderschmidt, Eds. Abt, Cambridge, MA, 1988. xvi, 293 pp., illus. \$39.95; paper, \$29.

Heterosiloxanes. Vol. 1. Derivatives of Non-Biogenic Elements. M. G. Voronkov, E. A. Maletina, and V. K. Roman. Harwood, New York, 1988. xiv, 469 pp., illus. \$298. Soviet Scientific Reviews Supplement Series. Translated from the Russian edition (Novosibirsk, 1985) by Kurt Gingold.

Human Abilities in Cultural Context. S. H. Irvine and J. W. Berry, Eds. Cambridge University Press, New York, 1988. xxii, 610 pp., illus. \$69.50.

Human Biology. Form, Function, and Adaptation. William DeWitt. Scott, Foresman, Glenview, IL, 1988. xvi, 605 pp., illus. \$25.

Hydrodynamics and Sediment Dynamics of Tidal Inlets. David G. Aubrey and Lee Weishar, Eds. Springer-Verlag, NY, 1988. x, 456 pp., illus. Paper, \$50.30. Lecture Notes on Coastal and Estuarine Studies, vol. 29. Based on a symposium, Woods Hole, MA, Dec. 1986.

Interleukin 2. Kendall A. Smith, Ed. Academic Press, San Diego, CA, 1988. xxii, 311 pp., illus. \$69.

International Navigation. Rocks and Shoals Ahead? Jon M. Van Dyke, Lewis M. Alexander, and Joseph R. Morgan, Eds. Law of the Sea Institute, University of Hawaii, Honolulu, 1988. x, 435 pp., illus. \$39. From a workshop, Honolulu, HI, Jan. 1986.

Intuitive Judgments of Change. Linda Silka. Springer-Verlag, New York, 1988. x, 214 pp. \$49. Springer Series in Social Psychology.

The Inverse Gaussian Distribution. Theory, Methodology, and Applications. Raj S. Chikara and J. Leroy Folks. Dekker, New York, 1989. x, 213 pp., illus. \$79.95. Statistics, vol. 95.

Islands in a Far Sea. Nature and Man in Hawaii. John L. Culliney. Sierra Club Books, San Francisco, 1988. xiv, 410 pp., illus. \$24.95.

James J. Gibson and the Psychology of Perception. Edward S. Reed. Yale University Press, New Haven, CT, 1989. xii, 348 pp., illus. \$32.50.

Judicial Decision Making, Sentencing Policy, and Numerical Guidance. Austin Lovegrove. Springer-Verlag, New York, 1988. xii, 320 pp., illus. \$76. Research in Criminology.

Der Kreis um Konrad Lorenz. Ideen, Hypothesen, Ansichten. W. M. Schleidt, Ed. Parey, Berlin, 1988. 206 pp. DM 38. Biologie und Evolution Interdisziplinär. Forty-seven papers, in German, honoring the ethologist on his 85th birthday.

Laboratory Diagnosis of Infectious Diseases. Vol. 2. Viral, Rickettsial, and Chlamydial Diseases. E. H. Lennette, P. Halonen, and F. A. Murphy, Eds. Springer-Verlag, New York, 1988. xxvi, 961 pp., illus. \$140.

Learning and Individual Differences. Advances in Theory and Research. Phillip L. Ackerman, Robert J. Sternberg, and Robert Glaser, Eds. Freeman, New York, 1989. xiv 343 pp., illus. \$29.95; paper, \$19.95. A series of Books in Psychology.

Long-Term Dynamical Behaviour of Natural and Artificial N-Body Systems. Archie E. Roy, Ed. Kluwer, Norwell, MA, 1988. xviii, 526 pp., illus. \$129. NATO Advanced Science Institutes Series C, vol. 246. From an institute, Cortina d'Ampezzo, Italy, Aug. 1987.

Louis Agassiz. A Life in Science. Edward Lurie. Johns Hopkins University Press, Baltimore, 1988. xvi, 457 pp. + plates. Paper, \$14.95. Reprint, 1960 ed.

Machine Intelligence 11. Logic and the Acquisition of Knowledge. J. E. Hayes, D. Michie, and J. Richards, Eds. Clarendon (Oxford University Press), New York, 1988. viii, 460 pp., illus. \$85. From a workshop, Strathclyde, Scotland, 1985.

Making Sense of Data. A Self-Instruction Manual on the Interpretation of Epidemiological Data. J. H. Abramson. Oxford University Press, New York, 1988. xii, 326 pp. \$39.95; paper, \$18.95.

A Manual of Advanced Celestial Photography. Brad D. Wallis and Robert W. Provin. Cambridge University Press, New York, 1988. xviii, 388 pp., illus., + plates. \$39.50.

Mathematical Visions. The Pursuit of Geometry in Victorian England. Joan L. Richards. Academic Press, San Diego, CA, 1988. xiv, 266 pp., illus. \$34.95.

Mechanisms and Consequences of DNA Damage Processing. Errol C. Friedberg and Philip C. Hanawalt, Eds. Liss, New York, 1988. xxx, 606 pp., illus. \$110. UCLA Symposia on Molecular and Cellular Biology, vol. 83. From a symposium, Taos, NM, Jan. 1988.

Medicine's New Vision. Howard Sochurek. Mack, Easton, PA, 1988. xii, 179 pp., illus. \$39.95.

Monoclonal Antibody Therapy. Herman Waldmann, Ed. Karger, Basel, 1988. x, 173 pp., illus. \$92. Progress in Allergy, vol. 45.

Monte Carlo Simulation in Statistical Physics. An Introduction. K. Binder and D. W. Heermann. Springer-Verlag, New York, 1988. x viii, 127 pp., illus. \$35. Springer Series in Solid-State Sciences, vol. 80.

Multinational Drug Companies. Issues in Drug Discovery and Development. Bert Spilker. Raven, New York, 1988. xxvi, 606 pp., illus. \$69.

The NASA Mars Conference. (Washington, DC, July 1986.) Duke B. Reiber, Ed. Published for NASA and the American Astronautical Society by Univelt, San Diego, CA, 1988. xvi, 535 pp., illus., + plates. \$50; paper, \$30. Science and Technology Series, vol. 71.

Parasitic Infections in the Compromised Host. Peter D. Walzer and Robert M. Genta, Eds. Dekker, New York, 1989. xvi, 532 pp., illus. \$125. Infectious Disease and Therapy, vol. 1.

People and Computers IV. D. M. Jones and R. Winder, Eds. Published for the British Computer Society by Cambridge University Press, NY, 1988. viii, 594 pp., illus. \$79.50. British Computer Society Workshop Series. From a conference, Manchester, U.K., Sept. 1988.

The People's Remedy. Health Care in El Salvador's War of Liberation. Francisco Metz. Monthly Review Press, New York, 1989. xxiv, 200 pp. + plates. \$22; paper, \$8. Translated from the Spanish edition (San Salvador, 1988) by Jean Carroll.

Periodic Screening for Breast Cancer. The Health Insurance Plan Project and Its Sequelae, 1963-1986. Sam Shapiro *et al.* Johns Hopkins University Press, Baltimore, 1988. xviii, 214 pp., illus. \$35. The Johns Hopkins Series in Contemporary Medicine and Public Health.

Physiology and Biochemistry of Auxins in Plants. Milan Kutáček, Robert S. Bandurski, and Jan Křekule, Eds. SPB, The Hague, 1988. xxii, 428 pp., illus. \$105. From a symposium, Liblice, Czechoslovakia, Sept.-Oct. 1987.

Planets and Perception. Telescopic Views and Interpretations, 1609-1909. William Sheehan. University of Arizona Press, Tucson, 1988. xiv, 324 pp., illus. \$35.

Plant Stress-Insect Interactions. E. A. Heinrichs, Ed. Wiley-Interscience, New York, 1988. xiv, 492 pp.,

illus. \$59.95. Environmental Science and Technology.

Psychometric Properties of Fourteen Latent Constructs from the Oregon Youth Study. Deborah M. Capaldi and Gerald R. Patterson. Springer-Verlag, New York, 1989. x, 287 pp. Paper, \$35. Recent Research in Psychology.

Radiochemicals in Biomedical Research. E. A. Evans and K. G. Oldham, Eds. Published for the Society of Chemical Industry by Wiley, New York, 1988. viii, 154 pp., illus. \$84.95. Critical Reports on Applied Chemistry, vol. 24.

The Reality of Time. Errol E. Harris. State University of New York Press, Albany, 1989. xii, 204 pp. \$39.50; paper, \$12.95. SUNY Series in Philosophy. Based on lectures, Peterborough, Ontario, 1984.

Receptor Pharmacology and Function. Michael Williams, Richard A. Glennon, and Pieter B. M. W. M. Timmermans, Eds. Dekker, New York, 1989. xviii, 778 pp., illus. \$150. Clinical Pharmacology, vol. 13. Based on a symposium, Boston, MA, Aug. 1985.

The Regulation of Potassium Balance. Doald W. Seldin and Gerhard Giebisch, Eds. Raven, New York, 1988. x, 374 pp., illus. \$69.

Reindeer on South Georgia. The Ecology of an Introduced Population. N. Leader-Williams. Cambridge University Press, New York, 1988. xiv, 319 pp., illus. \$49.50. Studies in Polar Research.

Rio Negro, Rich Life in Poor Water. Amazonian Diversity and Foodchain Ecology as Seen Through Fish Communities. Michael Goulding, Mirian Leal Carvalho, and Efrém G. Ferreira. SPB, The Hague, 1988. xii, 200 pp., illus. \$35.

Shaping Written Knowledge. The Genre and Activity of the Experimental Article in Science. Charles Bazerman. University of Wisconsin Press, Madison, 1988. xii, 356 pp. \$40; paper, \$17.50. Rhetoric of the Human Sciences.

(Continued on page 97)

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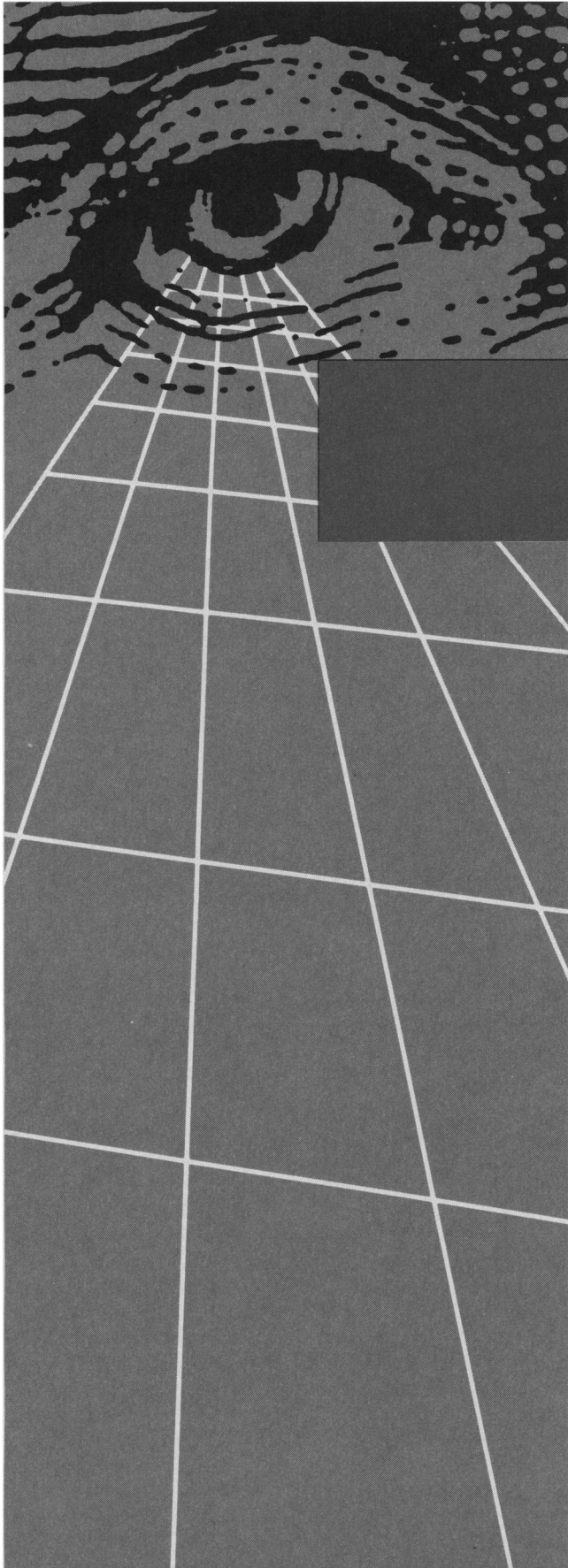
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“Work, Finish, Publish.”
Michael Faraday

Products & Materials

The 40th annual Pittsburgh Conference & Exposition on Analytical Chemistry & Applied Spectroscopy was held last month in Atlanta, GA. About 850 companies exhibited their products for the benefit of 26,741 registrants. Following are some of the many new products introduced this year at the conference.

Programmable Mixer

The Lightnin LabMaster II Model 2510 is a bench-top mixer with a programmable display panel. The mixer can operate on its own or receive instructions from and send data to a computer via an RS-232 port. It also has two analog-to-digital ports to allow connection to temperature probes. The LabMaster II measures and displays power, flow, speed, and time; temperature can also be displayed in either Celsius or Fahrenheit. The power readout is accurate to ± 0.1 W, and the timer can count either up or down. The mixer measures speed 100 times per revolution for better accuracy. An international model with a metric-unit display is also available. Mixing Equipment. Circle 535.

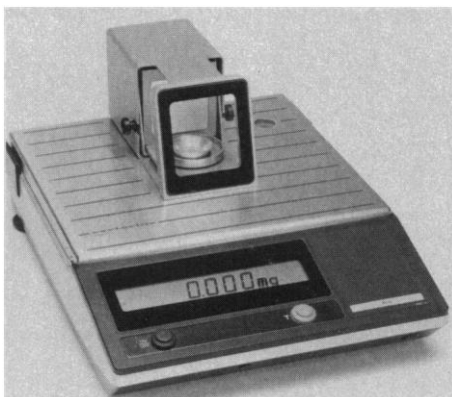
Protein Purification System

MultiLab automatically purifies proteins by chromatography. A software expert system monitors and controls all parameters. The computer has no keyboard; the researcher chooses a method and views operational statistics, the status of the experiment, flow paths, and chromatograms on a touch screen. After initial setup and data entry, the system can be left unattended. Users may print or later retrieve a log file that records the entire process. Separation methods may be developed with immunopurification, affinity chromatography, hydrophobic interaction chromatography, ion-exchange, gel-filtration, or chromatofocusing techniques. MultiLab is also suitable for methods development; because it operates at low and medium pressures, methods developed on it may be scaled up. About \$35,000. OROS Systems. Circle 541.

Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by *Science* or AAAS is not implied. Additional information may be obtained from the manufacturers or suppliers named by circling the appropriate number on the Readers' Service Card and placing it in a mailbox. Postage is free.

Top-Loading Microbalance

The M3P top-loading microbalance is sensitive to 1 μ g and has a maximum capacity of 3 g. It has three sensitivity ranges. Unlike most microbalances, the M3P does not have a large weighing chamber or a weighing pan that extends and retracts. Calibration is automatic. Because there are no



doors to open and close and no lockdown procedure to follow, the user can deposit and retrieve samples rapidly. The M3P includes an RS-232 interface. Sartorius Instruments. Circle 536.

Oligosaccharide Reference Standards

OligoStandards are oligosaccharide reference standards for glycoconjugate analysis. The standards include oligosaccharides that have been found on genetically engineered glycoprotein pharmaceuticals and that are involved in protein serum half-life, solubility, stability, and cell receptor interactions. These mammalian glycoprotein oligosaccharides have been developed for profiling glycoprotein oligosaccharide structures through retention time comparisons. Dionex. Circle 538.

Diode Array Detector for HPLC

The SPD-M6A Photodiode Array Detector for high-performance liquid chromatography (HPLC) is equipped with both a deuterium and a tungsten lamp. A temperature-controlled polychromator and dark-current correction compensate for array noise. Optional flow cells include a titanium flow cell, a preparative flow cell, and a high pressure-tolerance cell. The SPD-M6A comes with a computer, a color printer, and operating software. This software automatically recognizes peaks with impurities and can perform integration. Because spectrum and chromatogram files are stored in ASCII

format, they can be transferred to other programs for additional manipulations. \$20,000. Shimadzu Scientific Instruments. Circle 543.

Inert Autosampler Vials

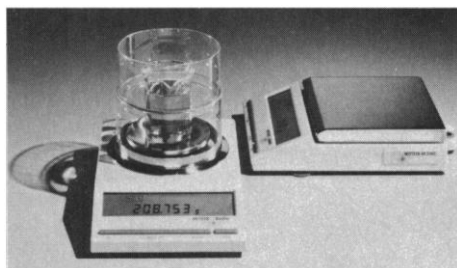
The Gold line of autosampler vials are made of inert glass and produced under stringent conditions that remove the alkaline content and thus minimize surface activity. These vials are designed for chromatography with polar materials or low sample concentrations. Chromacol (United Kingdom). Circle 542.

Polymer-Coated Glassware

PyrexPlus is a line of borosilicate glass labware with a transparent, nontoxic coating. The coating reduces the dangers of handling chemicals, volatiles, and infectious biologicals because it doubles the labware's resistance to impact fracture. The coating is laminated, not bonded; thus, if the glass does break, the contents remain inside the polymer coat. The PyrexPlus line includes threaded test tubes, aspirator bottles, reagent bottles, carboys, filter flasks, graduated cylinders, separatory funnels, and volumetric flasks. Corning Glass Works, Science Products. Circle 544.

Electrophoresis Gel Documentation

An electronic instant camera is available that prints hardcopy on thermal paper rather than on instant film. With the thermal paper, the cost per print is about 5¢ to 8¢. The camera was designed for photography of low-light fluorescent patterns, such as DNA gels stained with ethidium bromide, but may be used for photography of other templates such as stained protein gels or thin-layer chromatography plates. A video monitor allows the researcher to frame the image and to check the focus. Also, the user can perform contrast amplification, low-level enhancement, and baseline subtraction on integrated images stored in a frame buffer. Date, time, exposure time, and the sequential number of the exposure are printed on the hardcopy. The photo may be printed either as a positive or a negative. The charge-coupled device camera comes with an interference filter, a control unit, a 9-inch black-and-white video monitor, a video printer, a reproduction stand, and an ultraviolet transilluminator. Cybertech (West Germany). Circle 549.



Basic Laboratory Balance

The BasBal is a line of ten compact basic balances with capacities as high as 3 kg. Two of the models are equipped with electronic calibration, a vibration adapter, a weighing process adapter, and a bidirectional CL-RS-232C data interface for connecting to printers and computers. Mettler Instrument. Circle 546.

Nonmetallic Liquid Chromatograph

The 625 LC System is a liquid chromatograph designed for bioscience researchers. It has been designed especially for ion exchange, affinity, hydrophobic interaction, gel filtration, and reverse-phase separations, and it can accommodate photodiode-array or tunable ultraviolet-visible detection. The 625 has a flow range capability of 0.01 to 5 ml/min and a 4000-psi operating limit. Other features include an automated plunger wash, four-buffer blending, flexible nonmetallic tubing and injector design, and finger-tight fittings. Waters Chromatography Division of Millipore. Circle 545.

LC-MS-MS System

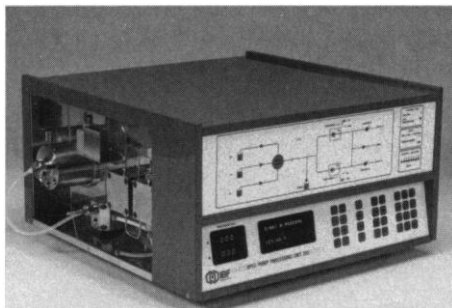
The API III is a dedicated high-performance liquid chromatography-tandem mass spectrometry (LC-MS-MS) system based on an ion source at atmospheric pressure. This technology eliminates the need for the liquid eluant from the chromatograph to enter the vacuum system of the mass spectrometer, thus avoiding contamination of the pumping system and analyzer. Analyses on heat-sensitive, biologically active compounds do not damage or destroy them. The API III can obtain sequence and molecular weight information on such biopolymers as peptides, proteins, and oligonucleotides with molecular weights from a few hundred to more than 100,000. Typically, a dilute solution of biomolecules provides molecular weight information to tens of kilodaltons on femtomole to picomole quantities with mass accuracies of ± 1 dalton and an analysis time of 1 to 2 min. SCIEX. Circle 548.

Chemical On-Line Search Software

ChemTalk Plus is a communications software program that allows direct access to and substructure searching of CAS Online. With its molecule editor and a mouse, researchers can draw chemical structures, which can then be automatically converted into CAS Online queries. To connect to CAS Online, the user chooses a menu item. After the search is completed, ChemTalk Plus can convert results into a format readable by ChemText; the user can thus incorporate search structures and text directly into reports. The program enables a personal computer to access mini and mainframe computers and to emulate VT100, VT220, VT640, Tektronix 4010, and Tektronix 4105 terminals. Chemtalk Plus operates on most IBM and compatible personal computers equipped with a graphics interface card and a mouse. Molecular Design. Circle 551.

HPLC Pump

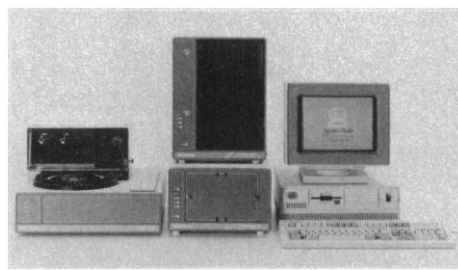
The Pump Processing Unit 260 is a microcomputer-controlled pump for high-performance liquid chromatography (HPLC). It can be programmed for all chromatographic system functions, including flow-



rate regulation, gradient control, fraction collection, pump or valve injection, column switching, parameter assignment, and detector remote control. As many as eight programs can execute from 1 to 99 cycles, and programs may be chained. The 260 is capable of flow rates from 1 to 1000 ml/min. IBF Biotechnics. Circle 547.

HPLC System

System Gold for Methods Development is a high-performance liquid chromatography (HPLC) system for developing and optimizing HPLC methods. Built into the system are automated procedures for solvent selection, injection, detection, and analysis. Analytical methods can be created to include



all parameters involved in the analysis; conditions for solvent delivery, detection, auto-sampling, data acquisition, data integration, and reporting all become part of the method and are stored on disk for later recall. The system's autosampler handles as many as 96 sample vials, and the detector has an array of 512 diodes. Software for the detector analyzes multivariate data, reads scan information in real time, and analyzes the data to determine peak purity. A graphic symbol appears beneath each peak to indicate how many impurities exist at any given time. Beckman Instruments, Altex Division. Circle 539.

Circular Dichroism Spectrometer

The Double CD is a circular dichroism (CD) spectrometer with two CD units. It collects two CD spectra simultaneously over the same wavelength range. The scanning range of the instrument is 170 to 700 nm, and it has a resolution of at least 3 Å over most of that range. The lock-in amplifiers are fully programmable. The Double CD comes with a computer and software for data acquisition, presentation, storage, and manipulation. Less than \$85,000, including installation and training. On-Line Instrument Systems. Circle 537.

Magnetic Sector Mass Spectrometer

The MAT 900 is a double-focusing magnetic sector mass spectrometry system with a combined array and secondary electron multiplier detector and a differentially pumped ion source. The array detector can simultaneously detect single ions within a mass window and is suitable for high-mass fast atom bombardment, field desorption, and liquid chromatography-mass spectroscopy analysis. For most efficient use of this array detector, the MAT 900 has an electric-magnetic sector forward geometry. The ion source is designed to prevent the loss of sensitivity with high-pressure inlet methods, such as fast atom bombardment and thermospray. \$750,000 to \$900,000. Finnegan MAT. Circle 550.

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And responded with a technically-advanced line of disposable filterware designed to make your work faster and more efficient than ever before.

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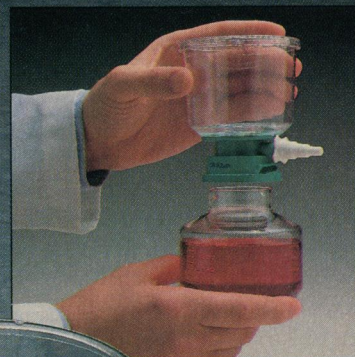
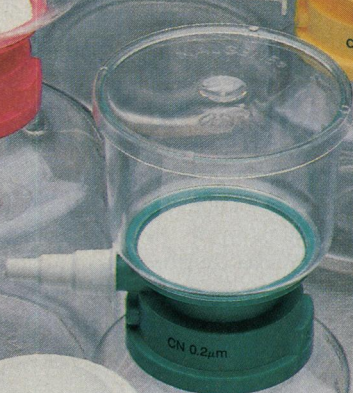
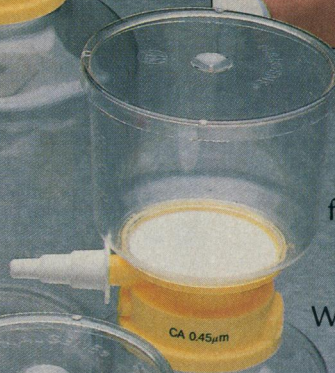
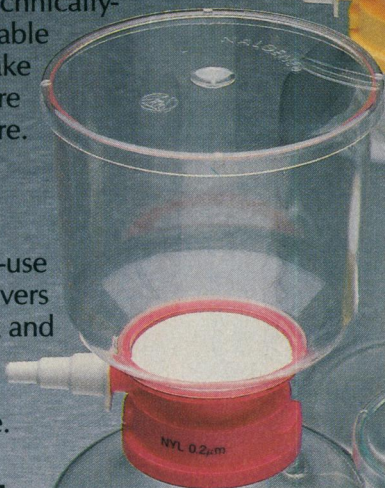
And gave you new easy-to-use two-piece units. Plus receivers designed for dispensing and storage with leakproof closures that are easy to put on and remove.

You asked for versatility. We listened.

And offered you extra capacity with 150-, 250-, 500-, and 1000-mL sizes. Plus graduations on receivers and uppers for easy measurement, because you asked for it.

You asked for easy identification. We listened.

So now, Nalgene Filter Units are color-coded by membrane material—and the pore size and membrane material are marked right on the collars.



You asked for speed. We listened.

And increased the effective filtration area by more than 25% for faster flow rates.

But we didn't change what we couldn't improve.

We didn't change the membranes or plastics you've always depended on. You get the same uncompromising standards you expect from Nalge, because all materials are carefully tested for cytotoxicity, and all units are guaranteed sterile. So you won't introduce any variables whatsoever into your work.

Nalgene Filterware . . . the name you've trusted for 20 years.

Your ideas are built right in.

Available from Authorized Nalgene Labware dealers worldwide. Or write or call:
Nalgene Labware Dept., Nalge Company,
Subsidiary of Sybron Corp., Box 20365,
Rochester, NY 14602-0365
Telephone (716) 586-8800 Telex 97-8242.

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The ability to listen. The technology to respond.

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(Continued from page 92)

Special Purpose Computers. Berni J. Alder, Ed. Academic Press, San Diego, CA, 1988. x, 282 pp., illus. \$49.95. Computational Techniques, vol. 5.

Spontaneous Cognitive Processes in Handicapped Children. Miriam Cherkas-Julkowski and Nancy Gertner. Springer-Verlag, New York, 1989. x, 171 pp. \$49. Disorders of Human Learning, Behavior, and Communication.

Stable Isotopes in Ecological Research. P. W. Rundel, J. R. Ehleringer, and K. A. Nagy, Eds. Springer-Verlag, New York, 1988. xvi, 525 pp., illus. \$89. Ecological Studies, vol. 68. Based on a workshop, Los Angeles, April 1986.

The Starry Room. Naked Eye Astronomy in the Intimate Universe. Fred Schaaf. Wiley, New York, 1988. viii, 264 pp., illus. \$19.95. Wiley Science Editions.

Structuralism. The Art of the Intelligible. Peter Caws. Humanities Press, Atlantic Highlands, NJ, 1988. xiv, 276 pp., illus. \$45. Contemporary Studies in Philosophy and the Human Sciences.

Synchrotron Radiation in Chemistry and Biology II. E. Mandelow, Ed. Springer-Verlag, New York, 1988. x, 166 pp., illus. \$69.50. Topics in Current Chemistry, vol. 147.

Technological Advances in Vaccine Development. Laurence Lasky, Ed. Liss, New York, 1988. xxviii, 691 pp., illus. \$130. UCLA Symposia on Molecular and Cellular Biology, vol. 84. From a symposium, Park City, UT, Jan.-Feb. 1988.

Traditional Medicine in Contemporary China. A Partial Translation of *Revised Outline of Chinese Medicine* (1972) with an Introductory Study on Change in Present-Day and Early Medicine. Nathan Sivin. University of Michigan Center for Chinese Studies, Ann Arbor, 1987. xxx, 549 pp. \$22.50; paper, \$14.50. Science, Medicine, and Technology in East Asia, vol. 2.

Trends in Colloid and Interface Science II. V. Degiorgio, Ed. Steinkopff, Darmstadt, and Springer-Verlag, New York, 1988. x, 317 pp., illus. \$96. Progress in Colloid and Polymer Science, vol. 76. From a meeting, Como, Italy, Sept. 1987.

Understanding Cognitive Science. Michael McClelland, Ed. Horwood, Chichester, U.K., and Halsted (Wiley), New York, 1988. 264 pp. \$54.95. Ellis Horwood Series in Cognitive Science.

Understanding Process Integration II. P. R. Crump, D. V. Greenwood, and R. Smith, Eds. Institution of Chemical Engineers, Rugby, U.K., 1988 (U.S. distributor, Hemisphere, New York). vi, 350 pp., illus. \$79.50. Institution of Chemical Engineers Symposium Series, no. 109. From a symposium, Manchester, U.K., March 1988.

The Universal Turing Machine. A Half-Century Survey. Rolf Herken, Ed. Oxford University Press, New York, 1988. xiv, 661 pp., illus. \$115.

Vertebrate Reproduction. E. W. Jameson, Jr. Wiley-Interscience, New York, 1988. xii, 526 pp., illus. \$67.50.

Vertebrates in Complex Tropical Systems. M. L. Harmelin-Vivien and F. Bourlière, Eds. Springer-Verlag, New York, 1989. xii, 200 pp., illus. \$69. Ecological Studies, vol. 69. Based on a symposium, Syracuse, NY, Aug. 1986.

Virological Infections. For Students and Practitioners of Medicine and Allied Health Sciences. Donald M. McLean. Thomas, Springfield, IL, 1988. xvi, 644 pp., illus. \$105.50.

Vospominaniia ob Igore Vasil'eviche Kurchatove. A. P. Alexandrov, Ed. Nauka, Moscow, 1988. 496 pp., illus. 2 rubles, 10 kopeks. Uchenye SSSR.

Water and Arid Lands of the Western United States. Mohamed T. El-Ashry and Diana C. Gibbons, Eds. Cambridge University Press, New York, 1988. xii, 415 pp., illus. \$59.50. A World Resources Institute Book.

Wet Site Archaeology. Barbara A. Purdy, Ed. Telford, Caldwell, NJ, 1988. xiv, 338 pp., illus. \$50; paper, \$32.50. From a conference, Gainesville, FL, Dec. 1986.

What Is Archaeology? An Essay on the Nature of Archaeological Research. Paul Courbin. University of Chicago Press, Chicago, 1988. xxvi, 197 pp. \$24.95. Translated from the French edition (Paris, 1982) by Paul Bahn.

Wood-Water Relations. Christen Skaar. Springer-Verlag, New York, 1988. x, 283 pp., illus. \$120. Springer Series in Wood Science.

Yankee Surgeon. The Life and Times of Usher Parsons (1788-1868). Seebert J. Goldowsky. Francis A. Countway Library of Medicine, Boston, and Rhode Island Publications Society, 1988. (distributor, Science History Publications, Canton, MA). xvi, 450 pp., illus. \$24.50.

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. **SCIENCE** reserves the right, in its discretion, to decline to publish advertisements submitted to it.

LINE CLASSIFIED ADVERTISING DEADLINES: Thursday, 10 a.m., 2 weeks prior to issue date (mailed on issue date). For deadlines for display advertising, please contact Scherago Associates.

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

LINE CLASSIFIED (POSITIONS OPEN, COURSES, FELLOWSHIPS, MARKETPLACE, and so forth): \$40.00 per line; \$400 minimum, per week (minimum charge covers one inch on a single column; one inch equals 10 lines of 52 characters and spaces per line). No charge for use of box number. No agency commission for ads less than 4 inches. No cash discount. Prepayment required for all foreign ads. Purchase orders and/or cover letter including billing address required for all other advertising.

To ESTIMATE ad cost:

Structure ad copy on a separate page, on lines of 52 characters and spaces. Include any desired heading. Each line of heading, and/or extra line spaces, and all partial lines (including centered reply information) are counted as full lines. Ad titles located within the text are printed in boldface caps and are only 32 characters per line. In ESTIMATING the cost, multiply total lines x \$40.00 = approximate cost of ad. (This is an approximate cost ONLY. Allow for variation between estimated lines and actual typeset lines and the resulting final cost. Purchase orders must allow for some degree of flexibility and/or adjustment.)

CANCELLATION POLICY:

NOTE: Ad cancellations made after Thursday, TWO weeks prior to issue date incur a 10% production charge. Final deadline for cancellations is 12 p.m. Tuesday, ONE week prior to issue date. Cancellations must be in writing.

Send copy for all **Positions Wanted** ads and **Line Classified** ads less than 1/6 page in size (39 lines) to:

SCIENCE Classified Advertising
1333 H Street, NW, Room 940
Washington, DC 20005
Telephone: 202-326-6555

Send copy for **Fractional Display** ads, 1/6 page and larger, and all **Marketplace** ads to:

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

Blind ad replies should be addressed as follows:

Box (give number)
SCIENCE
1333 H Street, NW
Washington, DC 20005

POSITIONS WANTED

Biologist, Ph.D. (April 1989). Experience in protein isolation, purification and characterization, including HPLC. Seeking challenging postdoctoral position in a laboratory with ongoing research in protein chemistry. Box 47, **SCIENCE**.

Environmental/Comparative Physiologist, Ph.D. Established investigator with publications in thermoregulation, perinatal development, and drug-stress interaction. Current funding in ethanol research. Seeks academic position offering teaching and research opportunities. Box 27, **SCIENCE**.

Executive (Female). Highly motivated self-starter, European/U.S. education with experience in industry, research, and consulting, cross-cultural sensitivity and fluency in six languages seeks challenging position with international exposure. Box 48, **SCIENCE**.

POSITIONS WANTED

Flow Cytometry Operator. Experienced in operating and managing a flow cytometry facility involved in cell cycle and immunofluorescence analysis, and sorting. Will relocate. 2 Clifton Road, Clifton, NY 14431.

Registered Patent Agent. Patent searches and patentability opinions. Write for brochure. Scott Ramsey, Ph.D., 5253 Even Star Place, Columbia, MD 21044.

Science Writer/Editor for free-lance assignments. Biology degree and broad science knowledge. Research and foreign language skills. Douglas Garner, Box 7956, Austin, TX 78743-7956.

Translate Russian to English texts in biology, agriculture, travel and nature. Affordable charge. Write to: Vladimir Beregovoy, 2918 - 2nd St. N., Fargo, ND 58012.

Veterinary Pathologist, D.V.M., Ph.D., boarded; extensive teaching, research and service experience; mandatory retirement August 1989; good health, seeks challenging position. Box 49, **SCIENCE**.

POSITIONS OPEN

JOHNS HOPKINS AIDS VACCINE PROGRAM

TENURE-TRACK POSITION available for Ph.D. or M.D. at assistant or associate professor rank to evaluate cell-mediated immune responses to HIV infections and vaccines. Candidates will be expected to develop vigorous research program, with opportunity to participate in evaluations of other viral and parasitic vaccines under investigation at the Center for Immunization Research. Primary appointment is in the Department of Immunology and Infectious Diseases in School of Public Health; option for joint appointment in Division of Infectious Diseases in School of Medicine. Please submit curriculum vitae and names of three references to **Dr. Noel Rose c/o Dr. M. L. Clements, Johns Hopkins University (JHU) Center for Immunization Research, 624 North Broadway, Baltimore, MD 21205.** *JHU is an Equal Opportunity/Affirmative Action Employer.*

ALZHEIMER'S DISEASE RESEARCH CENTER

The Department of Psychiatry at The Mount Sinai School of Medicine seeks a candidate to pursue independent research interests in clinical genetics, pharmacology, neuroendocrinology, and imagery. The successful candidate must have an M.D. degree of at least 4 years of postgraduate training in psychiatry or neurology. Salary and academic appointment commensurate with experience. Please send curriculum vitae and a concise plan for future research to:

Kenneth L. Davis, M.D.
Professor and Chairman
Department of Psychiatry—Box 1230
The Mount Sinai School of Medicine
One Gustave L. Levy Place
New York, NY 10029-6574

The Mount Sinai School of Medicine is an Equal Opportunity and Affirmative Action Employer. Women and minorities are encouraged to apply.

ANATOMIST

The Department of Anatomy, University of Saskatchewan, College of Medicine, invites applications for a faculty appointment at the rank of assistant professor. Applicants should have postdoctoral experience with a strong research program in any area of anatomical sciences; however, research in functional anatomy is preferred. The successful candidate will be responsible for teaching gross and neuroanatomy to physical therapy students. *In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents.* Application, including curriculum vitae, names of three referees, and an outline of proposed research and previous teaching experience should be submitted to: **Dr. G. D. Burkholder, Department of Anatomy, College of Medicine, University of Saskatchewan, Saskatoon, Saskatchewan, Canada, S7N 0W0.**

POSITIONS OPEN

ANATOMIST: The National College of Chiropractic is seeking a gross anatomist, Ph.D. required. Ability to teach well is primary consideration. Tenure-track position with opportunity for research. Twelve-month year. Applications accepted until position is filled. Applicants should submit curriculum vitae, transcripts, and three letters of reference to:

Calvin C. Kuehner, Ph.D., Director
Division of Basic Sciences
The National College of Chiropractic
200 East Roosevelt Road
Lombard, IL 60148

ANATOMIST: Faculty position available to teach gross anatomy and histology. Full-time medical school salaried teaching position with minimal research responsibilities. Salary and rank are competitive and commensurate with experience. Please send curriculum vitae and the names of three references to: **Dr. Arnold L. Nagler, Associate Dean, Basic Sciences, New York College of Osteopathic Medicine, Old Westbury, NY 11568.** Affirmative Action/Equal Opportunity Employer.

AREA SPECIALIST, Field R&D, Latin America. Responsible for agricultural products field research and development, including *Bacillus thuringiensis*, biological insecticides, gibberellic acid growth regulators and other specialty agricultural products. Must utilize Spanish in the planning and execution of research projects and required 40% business travel to Latin America. Forty hours; 8:00 a.m. to 5:00 p.m., \$3,000 per month. Ph.D. in horticulture required, and 2 years of experience in the job offered or 2 years of experience as research or teaching assistant. Send résumé and Social Security Number to: **Illinois Department of Employment Security, 401 South State Street - 3 South, Chicago, IL 60605, Attention: L. Donegan, Reference #9010D.** An employer-paid ad.

ASSISTANT PROFESSOR

Behavioral Neurobiology. A tenure-track position is available at the Andrus Gerontology Center. Applicants should have a primary research and teaching interest in the general area of the neurobiology of aging with a demonstrated ability to carry out a strong and independent research program. Preference will be given to individuals with experience in behavioral neurobiology with a relevance to human neurodegenerative disease. Please submit curriculum vitae, statement of research goals, significant publications, and the names of three references to: **Dr. Thomas H. McNeill, Search Committee, Chair, Andrus Gerontology Center, University of Southern California, University Park MC-0191, Los Angeles, CA 90089-0191.**

ASSISTANT PROFESSOR EXTENSION SPECIALIST SMALL GRAIN AND FORAGE PATHOLOGY

Tenure-track faculty position, 90% extension, 10% research, emphasizing wheat and alfalfa pathology. Program will complement existing extension programs in row-crop and horticultural pathology and the research and teaching programs in the department. Interaction across departmental lines and extensive in-state travel are required. Ph.D. in plant pathology required; Extension experience preferred. Position available 1 June 1989. Apply by 1 May 1989, by sending curriculum vitae (including undergraduate and graduate transcripts) and a statement of interests, and have three persons write letters of reference to: **Dr. Douglas J. Jardine, Search Committee Chair, Department of Plant Pathology, Throckmorton Hall, Kansas State University, Manhattan, KS 66506. Telephone: 913-532-5810.** Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

ASSISTANT PROFESSOR. University of Wisconsin (UW). Tenure-track (research-teaching), Department of Horticulture-Madison, Research-breeding and genetics of self-pollinated crops. Possible collaborative research with molecular research programs. Qualifications: Ph.D. in plant genetics/breeding and knowledge of vegetable production. Contact: **Dr. David Curwen, UW Hancock Station, Hancock, WI 54943. Telephone: 715-249-5712.** Closing date 15 May 1989.

POSITIONS OPEN

The Department of Biochemistry, Duke University Medical Center, invites applications for the position of **ASSISTANT PROFESSOR** (tenure-track). The person will be expected to establish a strong independent research program and to teach both medical and graduate students. All applicants are welcome, although preference will be given to those with experience in physical biochemistry and structural biology. Send résumé, summary of research interest, and three letters of reference to: **Robert L. Hill, Duke University Medical Center, Durham, NC 27710.** Duke University is an Equal Opportunity/Affirmative Action Employer. The closing date for receipt of applications is 15 May 1989.

ASSISTANT PROFESSOR/INSTRUCTOR/STAFF ASSOCIATE. Available immediately to join the Immunogenetics Laboratory with interest/experience in HLA and/or lymphocyte differentiation antigens. Requirements: Ph.D. and 3 years of postdoctoral training in molecular genetics. Send curriculum vitae and bibliography to: **Dr. Nicole Suciu-Foca, College of Physicians and Surgeons of Columbia University, Department of Pathology, P & S 14-403, 630 West 168th Street, New York, NY 10032.**

The Department of Biology at Morehouse College invites applications for a tenure-track position at the **ASSISTANT/ASSOCIATE PROFESSOR** level in biochemistry to begin in September 1989. Applicants must hold a Ph.D. degree in biochemistry and be prepared to teach a general course in biochemistry to juniors and an advanced biochemistry seminar course to senior undergraduate students. Faculty members are expected to maintain active research programs which involve undergraduate and graduate students. Closing date: 12 May 1989 or until suitable candidates are found. Applicants should submit their curriculum vitae, graduate academic transcript and a statement of teaching and research goals, and arrange to have three letters of recommendation sent to: **Dr. J. K. Haynes, Chairman, Department of Biology, Morehouse College, 830 Westview Drive, SW, Atlanta, GA 30314.**

University of California Irvine (UCI), College of Medicine, OB/GYN. **ASSISTANT/ASSOCIATE RESEARCHER** (Ph.D.-Laboratory Director), gynecologic oncology; experience in immunology and/or pharmacology and proven ability to secure grant funding.

Position requires strong academic and research credentials and postgraduate teaching. UCI is an Equal Opportunity/Affirmative Action Employer. Send curriculum vitae and five references to: **Thomas J. Garite, M.D., Obstetrics and Gynecology, UCI Medical Center, 101 The City Drive, Orange, CA 92668.**

ASSOCIATE DEAN RESEARCH AND ADVANCED STUDIES

The School of Veterinary Medicine at Louisiana State University and A&M College invites nominations and applications for the position of Associate Dean for Research and Advanced Studies.

Qualifications for the position include the D.V.M. or equivalent and/or Ph.D. degrees and extensive research experience with notable accomplishments. Applicants must have achievements in attracting extramural funding for research and in sustaining viable research programs. Experience in advanced education, the guidance of graduate students, and a record of successful cooperative research endeavors are important characteristics. The desired candidate has demonstrated leadership abilities, is expected to satisfy professorial rank and tenure requirements suitable for academic faculty appointment, and is eligible for membership on the graduate faculty. The salary is commensurate with qualifications and experience.

Applications will be accepted through 16 May 1989, or until the position, which becomes available 1 July 1989, is filled. Send application with curriculum vitae as well as names, addresses and telephone numbers of four referees to:

**Dr. J. Storz, Search Committee Chairman
Department of Veterinary Microbiology
and Parasitology
School of Veterinary Medicine
Louisiana State University
Baton Rouge, LA 70803
Telephone: 504-346-3312**

LSU is an Equal Opportunity and
Affirmative Action Employer.

POSITIONS OPEN

The University of California, San Diego (UCSD), Department of Medicine is recruiting for an **ASSISTANT RESEARCH GENETICIST** to establish independent research programs in molecular genetic approaches to human disease. In addition applicants will be asked to assume responsibility for developing a Molecular Diagnosis Laboratory related to genetic screening and DNA-probe analysis. Ph.D. required with training in molecular genetics and experience in recombinant DNA technology. Salary established within UCSD salary scale. Send résumé by 1 May 1989 to **Oliver W. Jones, M.D., Department of Medicine, M-039, UCSD School of Medicine, La Jolla, CA 92093.** Affirmative Action/Equal Opportunity Employer.

ASSISTANT OR ASSOCIATE PROFESSOR TENURE-TRACK POSITION DEPARTMENT OF OTOLARYNGOLOGY

The Otolaryngological Research Group is seeking a research biochemist with a background in carbohydrate/protein biochemistry with an emphasis on receptors or cell adherence relative to developmental biology, to develop a biochemical/molecular biological program in the Department of Otolaryngology. Additional skill/knowledge of molecular biology desirable. Individual will participate in a team effort with a group of researchers studying ear disease. Salary commensurate with experience. Postdoctoral experience required. Send curriculum vitae with three professional references to: **Ms. Teresa Martin, The Ohio State University, Otolaryngological Research Laboratories, 456 West 10th Avenue, Room 4331, Columbus, OH 43210.**

ATMOSPHERIC PHYSICIST to carry out field and laboratory studies related to cloud radiation and electrification processes. Duties include aircraft and cloud data reduction and analysis; design and construction of measurement systems; and program development. Requires Ph.D. in physics or related discipline, with experience in aircraft and/or laboratory cloud physics/chemistry; working knowledge of electronics and computing related to aircraft operations and/or laboratory instrumentation. Position will be filled at either the assistant or associate professor level, rank and salary dependent upon qualifications. Applications must be received by 31 May 1989. Send résumé and letter of interest to: **Personnel Office, Desert Research Institute, University of Nevada System, P.O. Box 60220, Reno, NV 89506.** An Affirmative Action/Equal Opportunity Employer.

BIOCHEMICAL GENETICIST. The Department of Pediatrics, University of Arizona College of Medicine, is seeking a geneticist with primary research emphasis in basic biochemical or molecular genetics to join an active section with one molecular and two clinical geneticists. Qualifications should include the M.D. and/or Ph.D. degree and ABMG Board certification or eligibility in clinical biochemical genetics. The position is at the assistant professor level in the tenure track and will be an integral part of a new Mammalian Molecular and Developmental Genetics Unit in the Children's Research Center. Contact: **H. Eugene Hoyme, M.D., Chief, Section of Genetics/Dysmorphology, Department of Pediatrics, University of Arizona College of Medicine, Tucson, AZ 85724. Telephone: 602-795-5675.** The University of Arizona is an Equal Employment Opportunity/Affirmative Action Employer. Closing date is 15 May 1989, or when position is filled.

BIOLOGY—MOLECULAR BIOLOGY. A TENURE-TRACK POSITION at assistant or associate rank is available at Delaware State College in September 1989. Minimum qualifications include a Ph.D. in biological sciences with strong concentration in molecular biology, and demonstrated ability to work effectively with students. The successful candidate will be expected to develop a research program and teach undergraduate and graduate courses in area of expertise. Involvement in undergraduate program will include teaching introductory and/or advanced level courses. Experience supervising master's level students and publication record desirable. Send curriculum vitae, official transcripts, and three letters of reference by 21 April 1989 to: **Dr. Gustav Ofori, Chairperson Search Committee, Department of Biological Sciences, Box 626, Delaware State College, Dover, DE 19901.** Affirmative Action/Equal Opportunity Employer.

PENNSTATE



The Pennsylvania State University
College of Medicine

CHAIR, DEPARTMENT OF PEDIATRICS

Dr. Nicholas M. Nelson, the founding Chairman of the Department of Pediatrics at The Pennsylvania State University College of Medicine, The Milton S. Hershey Medical Center, has retired from the chair, and a Search Committee has been established to identify his successor. The only academic referral center between Pittsburgh and Philadelphia, the Hershey Medical Center is presently establishing a Children's Hospital within the University Hospital to enhance pediatric services for a general population of 4.2 million people in Pennsylvania's fastest growing region. The Department of Pediatrics annual outpatient visits exceed 20,000; annual hospital admissions are 1200. Of an additional 390 admissions to Newborn Intensive Care, approximately half are referrals from outside hospitals. Pediatric clinical services and research are currently supported by nearly one million dollars annually from private fund raising activities, in addition to grants and contracts.

A seven-floor, 150-bed addition to the University Hospital, now under construction, will incorporate the facilities of the Elizabethtown Hospital and Rehabilitation Center, a center for the management of chronic disabling conditions of children and young adults. The new facility will also include a new 30-bed Newborn Intensive Care Unit, a 12-bed Pediatric Intensive Care Unit, an expanded inpatient child psychiatry unit, and two new outpatient units.

The new Chairperson will be expected to build on these strengths. We are seeking a person with the vision and leadership abilities to enhance the department's clinical capabilities, promote and expand faculty research, and continue the department's distinguished record of undergraduate and graduate education.

Submit applications or nominations by April 30, 1989 to:

Julien F. Biebuyck, M.B., D.Phil.,

Chairman, Search Committee for Chair of Pediatrics

THE PENNSYLVANIA STATE UNIVERSITY

COLLEGE OF MEDICINE

THE MILTON S. HERSHEY MEDICAL CENTER

P.O. Box 850, Drawer AA-7, Hershey, PA 17033

Equal Opportunity Affirmative Action Employer

SEARCH
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ASSOCIATE EDITOR

We're looking for a PhD molecular biologist with physiological orientation to join *Science* as an editor. The successful applicant will be able to demonstrate a broad range of interests and some experience with biochemical approaches to medical problems. Requirements include at least two or three years of post-doctoral experience and publications in the refereed literature.

Science editors have varied responsibilities in manuscript selection ranging from editing for clarity to soliciting papers. Previous editorial experience is not required. This is a full-time position in our Washington offices.

Please send resume and list of publications with cover letter and salary requirements to:

Mr. Gregory Stokes

AAAS

1333 H Street, NW

Washington, DC 20005

EOE

Assistant Chemist Radiopharmaceutical Development Program

The University of Tennessee Medical Center, a 600 bed Level I Trauma Center, is seeking an Assistant Chemist for the Nuclear Medicine section, Department of Radiology.

Requires a synthetic organic chemist to prepare and analyze radiopharmaceuticals. A synthetic organic chemist with a Masters' degree or equivalent experience is required. The candidate should possess a strong organic chemistry background, experience in modern analytical techniques and strong communicative and interactive skills. The candidate will be responsible for performing routine radiopharmaceutical preparations and actively interacting with staff technologists to assure pharmaceutical purity of the preparations. Experience with positron emitters encouraged but not necessary. This position will perform daily organic synthesis of PET radiopharmaceuticals.

The University of Tennessee Medical Center is located in beautiful East Tennessee at the foothills of the Great Smokey Mountains. Affording metropolitan conveniences coupled with rural charm.

Apply to: **Mark Goodman, Ph.D.**

Director of Radiopharmaceutical Development



THE UNIVERSITY OF TENNESSEE
Medical Center at Knoxville

1924 ALCOA HIGHWAY

KNOXVILLE, TENNESSEE 37920

(615) 544-9520

EEO/An Affirmative Action/Title XIX/ Section 504 Employer

SENIOR SCIENTIST Cardiovascular Pharmacology/Physiology

Norwich Eaton Pharmaceuticals, Inc., a Procter & Gamble Company, Norwich, New York, is seeking, in our Cardiovascular Department, a doctorate level pharmacologist or physiologist to conduct research as head of our large-animal-model cardiac arrhythmia laboratory. The successful candidate, preferably with postdoctoral training, will have experience in the surgical preparation and use of nonrodent arrhythmia models. This critical position requires the ability to establish new models as needed, and to design, execute, and interpret experiments for evaluating cardiovascular effects of new chemical entities, using state-of-the-art systems of data collection and analysis. The successful candidate will manage an established group of scientists and participate in a multidisciplinary team effort of new drug discovery. Well developed oral and written communication skills, as evidenced by paper presentation and publication, are required.

The well equipped research laboratories of Norwich Eaton Pharmaceuticals, Inc., a subsidiary of a Fortune 500 corporation, are in Norwich, NY, in the Binghamton-Utica-Syracuse triangle. Norwich Eaton offers nationally competitive salary and benefits. This small community provides an excellent family living environment in a true four season climate. Candidates should send their resume to:

N. W. Andrews
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Eaton Avenue
Norwich, NY 13815

Equal Opportunity Employer

POSITIONS OPEN

BIOCHEMIST/IMMUNOCHEMIST

We're Pierce Chemical, an international life-science/biotech company. Our home base, Rockford, Illinois, is a mid-sized city located just minutes from Chicago and Milwaukee. Pierce has an opening in the Process Development Department for someone who is looking to grow with a successful company. We are seeking a Ph.D. scientist with experience in protein purification or immunology. This position offers significant opportunities for creative development and personal achievement.

Please send curriculum vitae, three references, and salary requirements to:

Reference: R. L.
Human Resource Manager
Pierce
P.O. Box 117
Rockford, IL 61105
Equal Opportunity Employer.

BIOLOGY FACULTY POSITION: Beginning late August 1989. Assistant professor or instructor of biology (sabbatical leave replacement with possibility of renewal). Ph.D. preferred, Master's degree acceptable. Teaching responsibilities include general biology, cell biology, and physiology. Send curriculum vitae, transcripts, and three letters of reference by 15 April 1989, to: John L. Tjostem, Head, Biology Department, Luther College, Decorah, IA 52101. An Equal Employment Opportunity Employer.

CHAIR, ANIMAL SCIENCES

The University of Vermont, College of Agriculture and Life Sciences, is seeking a chair for the Department of Animal Sciences. In addition to academic credentials warranting appointment at the full professor level, successful administrative experience or documented potential is required. The ideal candidate will possess a Ph.D. in animal sciences or a related area, a working knowledge of the land grant system and a current record of excellence in research and teaching. Excellent communication skills are required to interact with the diverse groups interested in maintaining a strong dairy and livestock industry in Vermont. Current research strengths within the Department include rumen microbiology, microbial ecology of the bovine mammary gland and ruminant appetite physiology. The ideal candidate will bring a high level of motivation to guide the Department into areas of importance in modern large animal science disciplines. Opportunities for new faculty members exist currently and in the near future. As the College of Agriculture and Life Sciences is currently undergoing a major reorganization, the new chair will have a strong influence on the magnitude and direction of collegiate and departmental growth. Nominations are encouraged. Address applications (to include curriculum vitae, names of five referees, reprints of recent papers, an explanation of why this particular position is appealing to you and what you can bring to the University of Vermont including leadership and teaching accomplishments) to: Dr. Warren I. Schaeffer, Chair Search Committee for Animal Sciences, Department of Microbiology, Given Building, Burlington, VT 05405. Applications will be accepted until 31 July 1989 or until the position is filled. *Women and minority candidates are encouraged to apply. The University of Vermont is an Equal Opportunity/Affirmative Action Employer.*

CYTOGENETICIST: Vivigen Laboratory has an opening for an ABMG Board-certified or Board-eligible cytogenetics laboratory director. Applicants should hold a Ph.D. or M.D. degree with a strong interest in clinical service. This position offers an excellent salary and benefits package as well as an opportunity to join the management team of the company leading the nation in private sector genetic testing. Send curriculum vitae and three references to: Yemia Kiamichi, Vivigen, Inc., 435 St. Michael's Drive, Santa Fe, NM 87501. Telephone: 505-988-8744.

EXPERIENCED CYTOGENETIC TECHNOLOGISTS needed for high-volume private laboratory located in the mountains of northern New Mexico. These positions offer excellent salaries and benefits, resort living and the chance to become part of a dynamic rapidly growing company through an employee stock purchase program. Send résumé and three references to: Yemia Kiamichi, Vivigen, Inc., 435 St. Michael's Drive, Santa Fe, NM 87501. Telephone: 505-988-9744.

POSITIONS OPEN

CHAIRMAN, DEPARTMENT OF MEDICINE

We seek nominations of candidates for the position of Chairman of the Department of Medicine at the Albany Medical Center. This position holds full responsibility for all academic and clinical programs at this regional academic health science center. Candidates must demonstrate a record of support and direction of research, teaching and residency programs, and evidence strong administrative and management skills. Must be Board-certified. Send curriculum vitae with complete bibliography to: A. John Popp, M.D., Chairman, Medicine Search Committee, A-61, Albany Medical Center, Albany, NY 12208. *Affirmative Action/Equal Opportunity Employer/M/F.*

CHAIRPERSON, Department of Biochemistry: The National College of Chiropractic is seeking a biochemist, Ph.D. required. Teaching general biochemistry required. Tenure-track position with opportunity for research. Twelve-month year. Applications accepted until position is filled. Applicants should submit curriculum vitae, transcripts, and three letters of reference to:

Calvin C. Kuehner, Ph.D., Director
Division of Basic Sciences
The National College of Chiropractic
200 East Roosevelt Road
Lombard, IL 60148

CHAIRPERSON, Department of Microbiology: The National College of Chiropractic is seeking a microbiologist, Ph.D. required. Teaching fundamental microbiology required. Tenure-track position with opportunity for research. Twelve-month year. Applications accepted until position is filled. Applicants should submit curriculum vitae, transcripts, and three letters of reference to:

Calvin C. Kuehner, Ph.D., Director
Division of Basic Sciences
The National College of Chiropractic
200 East Roosevelt Road
Lombard, IL 60148

DEVELOPMENTAL BIOLOGY AND NEUROSCIENCE: Two tenure-track **FACULTY POSITIONS** in the Department of Anatomy Program in Cell Biology and Neuroscience. Applicants for the associate professor position should have an ongoing extramurally funded research program, an established record of scholarship and a willingness to direct team-taught and problem-oriented medical gross anatomy; applicants at the assistant professor level should have a postdoctoral experience, an active research program, and a willingness to teach a portion of medical gross anatomy. Preferences will be given to cellular/molecular approaches to study CNS development and plasticity and to molecular studies of cell-cell interactions, proto-oncogenes, growth factors and regulation of gene expression. The Medical Center has active programs in molecular genetics, neuroscience, retinal research, aging, and ultrasonic evaluation of arterial disease. A National Biomedical Research Technology Resource Center, including IVM, TEM, and SEM, is on campus. Send curriculum vitae and names of three references to: Craig K. Henkel, Ph.D., Department of Anatomy, Bowman Gray School of Medicine, 300 South Hawthorne Road, Winston-Salem, NC 27103. *Affirmative Action/Equal Opportunity Employer.*

DEVELOPMENTAL BIOLOGY/VERTEBRATE ZOOLOGY—ASSISTANT PROFESSOR: The Natural Science Department, Plymouth State College, invites applications for a 1-year faculty position, with possibility of becoming tenure-track, in the biology major program to include teaching vertebrate zoology, animal physiology, experimental/descriptive embryology, and acting as an undergraduate research project advisor for projects in area of developmental biology/physiology. General education responsibilities include teaching general biology, lectures and labs. Ph.D. in discipline preferred. ABD considered. Prior college teaching experience helpful, but not required. To begin fall 1989. Starting salary: \$21,000 to \$24,000. Send curriculum vitae and three letters of recommendation or three names of references by 21 April 1989 to: Chair, Biology Search Committee, Department of Natural Science, Plymouth State College, Plymouth, NH 03264. *PSC is an Affirmative Action/Equal Employment Opportunity.*

POSITIONS OPEN

DIRECTOR CENTER FOR ENVIRONMENTAL MANAGEMENT

The Center for Environmental Management of Tufts University is an interdisciplinary, University-wide research, education and policy center. Since its creation, the Center has concentrated on hazardous and solid waste, toxic substances, global environmental pollution problems, and indoor air pollution. Major funding for the Center is provided by the U.S. Environmental Protection Agency with some additional support from corporations. The Center seeks a Director to develop strategic plans and goals; solicit funding and other support; and manage staff and budgets. Prospective candidate must have an advanced degree; 5 years of management experience in at least one of the following areas: environmental policy, management, research, or education; strong interpersonal skills; and ability to work with government, industry, academia and public interest groups.

Deadline for application: 21 April 1989. Send two copies of résumé and salary requirement to: Deanna Roberts, Department of Human Resources, Tufts University, 169 Holland Street, Somerville, MA 02144. Telephone inquiries can be made by calling: The Center at 617-381-3486, Monday through Friday from 4:00 p.m. to 5:00 p.m. *An Affirmative Action/Equal Opportunity Employer.*

DEPARTMENT OF VETERANS AFFAIRS VETERANS HEALTH SERVICES AND RESEARCH ADMINISTRATION DIRECTOR MEDICAL RESEARCH SERVICE

The Department of Veterans Affairs invites applications for the position of Director, Medical Research Service. The Medical Research Service currently has a budget of about \$200 million and supports biomedical and behavioral sciences research of over 2500 VA scientists, 70 percent of whom are physicians. It is strongly committed to support of patient-oriented research across the entire spectrum from basic science to clinical applications of new knowledge. The Director is responsible for policy development, peer review management of all investigator-initiated research studies and budget formulation and distribution. Candidates are expected to be nationally recognized scientists and they must have an established record of scholarly achievement. The position is only open to U.S. citizens who hold an M.D. degree. Salary is \$75,500 with additional special pay up to \$24,000.

Qualified applicants are invited to send curriculum vitae, bibliography, and the names, addresses and telephone numbers of three respondents by 15 May 1989 to: Richard J. Greene, M.D., Ph.D., Assistant Chief Medical Director for Research and Development (15), Department of Veterans Affairs, 810 Vermont Avenue, N.W., Washington, D.C. 20420.



**Veterans
Administration**

ENVIRONMENTAL TOXICOLOGIST. Tenure-track position begins fall 1989. Expertise: ecological, physiological, biochemical or genetic effects of toxic substances. Teach undergraduate/graduate courses; participate in externally-funded research. Qualifications: Ph.D.; publications. Postdoctoral experience desirable. Application letter, curriculum vitae, copies of representative publications, names/telephone numbers of three references to: Search Committee, Toxicology, Huxley College of Environmental Studies, Western Washington University, Bellingham, WA 98225. Applicant review begins 15 May 1989; continues until position filled. *Western Washington University is an Affirmative Action/Equal Opportunity Employer.*

MOLECULAR BIOLOGY DATABASE SCIENTIST

GenBank Data Flow Domain Leader

Los Alamos National Laboratory, a worldwide leader in technological and scientific research, has an opportunity in its GenBank project for a molecular biologist or computer scientist with superb leadership skills. Primary responsibility will be oversight of the Data Flow Group of the GenBank nucleotide sequence data bank. Additional responsibilities will include: Supervision of staff responsible for data entry and data submissions. Development of strategies for shifting from in-house data entry to automated processing of direct submissions from the community generating data, especially through close contact with journal editors and large-scale sequencing projects. Participation in technical negotiations with collaborators and sponsors.

Applicants should have an MS in computer science and/or a PhD in molecular biology, or an equivalent combination of education and experience in related disciplines. We require experience with and understanding of administering data flow in and out of databases. An understanding of the data structures pertaining to molecular biology, and familiarity with the laboratory environment where DNA sequence data are generated are both desirable. Experience with relational database management systems is highly desirable, as is a background that includes supervisory experience. Excellent oral and written communication skills are required.

We offer the selected candidate a stimulating professional environment, along with an outstanding compensation and benefits package. For confidential consideration, please send a resume to: Richard Garcia (MS P280), Personnel Services Division 90153-V, Los Alamos National Laboratory, Los Alamos, NM 87545.

Affirmative Action/Equal Opportunity Employer. Must be able to obtain a Department of Energy Security Clearance.

University of California

Los Alamos



IGEN

CATALYTIC ANTIBODIES

ENZYMOLOGY GROUP LEADER

We are currently seeking a scientist with post-doctoral experience to join our **Catalytic Antibodies** research group.

The research will involve mechanistic and kinetic characterization of antibody based catalysts and the design of screening assays for novel reactions. Experience in a relevant area of enzymology or protein chemistry is ideal.

IGEN is a biotechnology company located in Maryland, close to Washington, DC specializing in the development of a new generic diagnostic technology and in the pharmaceutical and therapeutic applications of catalytic antibodies (ABZYMES™).

For confidential consideration, please send your curriculum vitae to: **IGEN, Inc., Human Resource Manager, 1530 East Jefferson Street, Rockville, Maryland 20852.**

EEOC

National Cancer Institute
National Institutes of Health,
Public Health Service

CANCER PREVENTION FELLOWSHIP PROGRAM

The **Division of Cancer Prevention and Control (DCPC)** is accepting applications for the Cancer Prevention Fellowship Program (CPFP). The purpose of this program is to attract individuals from a multiplicity of health science disciplines into the field of cancer prevention and control. The program provides for: Participation in the DCPC Cancer Prevention and Control Academic Course; Working at NCI directly with individual preceptors on cancer prevention and control projects; Brief assignments in cancer prevention and control programs at cancer centers, State Health Departments or other institutions. Funding permitting, ten Fellows will be accepted for up to three years of training, beginning July 1, 1990. Benefits include selected relocation and travel expenses, paid federal holidays, and participatory health insurance.

ELIGIBILITY

1. M.D. or D.O. from a U.S., territorial, or Canadian Medical School. Foreign medical graduates must have current ECFMG/FMGEMS certification and one year residency in a training program approved by the Accreditation Council for Graduate Medical Education.
- OR
2. Ph.D., Dr. P.H. or other doctoral degree in a related discipline (epidemiology, biostatistics, biomedical, nutritional, public health or behavioral sciences). Foreign education must be comparable to that received in accredited U.S., territorial, or Canadian institutions.
3. U.S. citizenship or resident alien eligible for citizenship within four years.

For details and application packet send a **POSTCARD** with your name and home address to:

Douglas L. Weed, M.D., Ph.D.
Cancer Prevention Fellowship Program
Division of Cancer Prevention and Control
National Cancer Institute
Executive Plaza South, T-41
Bethesda, MD 20892

Further inquiries: Mrs. Barbara Redding,
(301) 496-8640 or 496-8641.

DEADLINE FOR RECEIPT OF APPLICATIONS: SEPTEMBER 8, 1989.



NIH IS AN EQUAL OPPORTUNITY
EMPLOYER

EXECUTIVE DIRECTOR

WISCONSIN CENTER FOR DEMAND-SIDE RESEARCH

Six major gas and electric Wisconsin utilities, University of Wisconsin and the Wisconsin Public Service Commission have established a new research center to study utility customers' energy usage with the objective of improving use efficiency to modify energy demand load shapes and levels. The Executive Director will report to a Board of Directors and be responsible for a budget of \$1-2 million/year, fund-raising, and supervise a staff of 7 to 12 permanent and project employees.

Candidates must have a minimum of 8 years progressively responsible professional experience in an energy related field, 5 years of which were at a managerial level. Must also have recognized research experience and be published in technical and policy aspects of the energy field. Ph.D. preferred.

Competitive salary and benefits. Send resumes by April 30, 1989 to:

Wisconsin Center for Demand-Side Research

P.O. Box 1641, Madison, WI 53701-1641

An Equal Opportunity Employer M/F/H/V

ALKERMES is a private biomedical company located in Cambridge, MA focused on the development of innovative systems for drug delivery across the blood-brain barrier. We seek well qualified scientists to address new product development. Openings are available for the following positions:

PHARMACOLOGIST:

Requires a Ph.D. in pharmacology with 2-3 years' post-doctoral training, with experience in animal models and pharmacokinetics. Some knowledge of toxicology would definitely be a plus. You will be responsible for developing animal models and obtaining preclinical data for products.

SYNTHETIC CHEMIST:

Requires a Ph.D. in peptide chemistry with 2-3 years' post-doctoral training, with experience in structure-activity relationships. This person will be involved in research activities, as well as GLP and GMP pilot-plant production.

ORGANIC CHEMIST:

Requires a Ph.D. in chemistry with extensive organic/bio-organic chemistry experience to work with protein chemists and molecular biologists. Candidate should possess a good working knowledge of organic synthesis and related analytical techniques. Experience with proteins would be helpful.

ALKERMES provides a stimulating environment in a strong academic community and offers an excellent salary and benefits package. Please send your C.V., interests, and three references in confidence to: **Alkermes, Inc., 26 Landsdowne Street, Cambridge, MA 02139.**

ALKERMES INCORPORATED

Alkermes, Inc. is an Equal Opportunity Employer

At Burroughs Wellcome Co. we create an environment in which individual initiative can flourish...as our recent Nobel winners have attested. We believe such freedom is the strength of our company...using the talents of our people whatever their field of endeavor.



GREAT PEOPLE MAKE A GREAT COMPANY

DRA International Preclinical Fellow (Postdoctoral)

In this position you will assist in the development and implementation of a system for reporting of all preclinical data required for international product registration. Qualified candidates should have a Ph.D. in Pharm.D. or Biochemistry OR a Master's/Pharmacology degree with two years of preclinical research experience. Technical writing and PC experience a plus. Postdoctoral fellows are initially appointed for up to one year with renewal for a second year upon the mutual agreement of the employee and the Company.

Burroughs Wellcome Co. offers top benefit programs along with very competitive salaries. If you are interested in working for us, submit your resume by May 7, 1989 to: **Burroughs Wellcome Co., Recruiting and Staffing, Job #60994-1, 3030 Cornwallis Road, Research Triangle Park, NC 27709.**



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An Equal Opportunity Employer

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Scientific Recruiters can now advertise positions almost as soon as the need arises. Instead of reserving space a month or more in advance, you can now place your ad four days before the magazine mailing date. *SCIENCE* is mailed on the cover date.

Film (right-reading, emulsion face down) or full camera ready art and insertion order must reach: *SCIENCE*, Short Close Desk, 1515 Broadway, New York, NY 10036 by NOON Mondays (except for legal holidays when material must reach New York by Noon Fridays). Because space is limited, the four-day close page will be reserved on a first-come, first-served basis, at a 15% premium. 1/4 and 1/2 page ads only.

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For further information, telephone Ed. Keller, Recruitment Advertising Manager, or Donna Rivera, Production Manager at *SCIENCE*: 212-730-1050, or write to: *SCIENCE*, 1515 Broadway, NY, NY 10036.

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Deputy Director

Health Effects
Research Laboratory
Research Triangle Park, NC



**U.S.
Environmental
Protection
Agency**

An Equal Opportunity Employer

The U.S. Environmental Protection Agency (EPA) is seeking candidates for the position of Deputy Director, Health Effects Research Laboratory (HERL). This position is located in Research Triangle Park, NC and is a permanent full-time position with a salary range of \$57,158 to \$74,303 per annum commensurate with qualifications.

HERL has a staff of about 300, over 100 of whom hold doctoral level degrees. The Laboratory has a diverse program which includes in vitro animal, human clinical, and epidemiological research designed to address issues related to the health effects of air and water chemical and biological pollutants.

The HERL is a multidisciplinary laboratory organized into six divisions: Neurotoxicology, Human Studies, Environmental Toxicology, Genetic Toxicology, Developmental Toxicology and Research and Regulatory Support. The Laboratory is staffed by health scientists with recognized expertise in a variety of disciplines—environmental medicine, physiology, epidemiology, statistics, biochemistry, neurotoxicology, reproductive toxicology, pulmonary toxicology, immunotoxicology, cardiovascular toxicology, genotoxicology, hepatotoxicology and other target organ toxicology, and microbiology—who formulate and implement a comprehensive research program to investigate human health effects resulting from exposure to environmental pollutants. The program includes both intramural investigations and extramural arrangements with universities, industry, private research institutions and other government agencies. The Deputy Director shares fully with the Director in the planning, programming, policy implementation, management, direction and control of the scientific and technical aspects of

the Laboratory. This includes assuring the development of a research strategy to meet the evolving needs of EPA, presenting the program, supervising four Associate Laboratory Directors who manage the Laboratory's media-based programs, directing the progress of these programs and ensuring the scientific quality and productivity of the Laboratory.

The preferred candidate for this position would possess the following qualifications:

1. Advanced degree in a biological, medical or environmental discipline with at least six years of professional experience in any of these areas. Applicable graduate coursework may be substituted for a portion of the required experience.
2. Experience as a supervisor of a scientific/professional staff.
3. Applicants must have recognized scientific expertise as evidenced by multiple publications in peer-reviewed literature and invitations to participate in national and international meetings/panels.
4. Proven ability to provide leadership in directing the development and progress of a creative and effective multidisciplinary human research program.
5. U.S. citizenship is required.

Forward curriculum vitae and names of three references prior to May 12, 1989 to: Dr. Lawrence W. Reiter, c/o Terri Burrell, HRMD (MD-29), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711.

ADVANCED LIGHT SOURCE

Lawrence Berkeley Laboratory

CALL FOR PROPOSALS

The **Advanced Light Source**, a national user facility at the Lawrence Berkeley Laboratory for the production of high-brightness, partially coherent X-ray and ultraviolet (XUV) synchrotron radiation, is scheduled to begin serving users in the spring of 1993.

LBL is now seeking proposals from Participating Research Teams to develop and operate the initial complement of beamlines and experimental facilities at the ALS. Proposals are encouraged for both

- Insertion-Device Teams
- Bending-Magnet Teams

All proposals will be evaluated by the ALS staff and reviewed by the ALS Program Review Panel.

The deadline for receipt of proposals is August 15, 1989.

To receive a proposal application form and information about the required content of a proposal, contact:

Alfred S. Schlachter
Scientific Program Coordinator
Advanced Light Source
Lawrence Berkeley Laboratory
MS 46-161
Berkeley, CA 94720

[fax: (415)-486-4873/e-mail: FRED@LBL]



**LAWRENCE
BERKELEY
LABORATORY**

POSITIONS OPEN

ECOTOXICOLOGIST

Exxon Biomedical Sciences, Inc. has an immediate opening for a qualified individual specializing in ecotoxicology and environmental hazard assessment. The successful candidate will have a Ph.D. in ecotoxicology or in an environmentally related field with 0 to 2 years of postdoctoral experience. Experience in or a knowledge of the application of both effects and fate data to real world concerns as well as knowledge of regulatory requirements (TSCA/PMN) would be desired.

Exxon Biomedical Sciences, Inc. performs both consulting and laboratory toxicology for affiliates around the world. Its resources include state-of-the-art aquatic toxicology, environmental chemistry and mammalian toxicology laboratories. The candidate will perform as a study monitor and internal consulting toxicologist. Client interactions are an important aspect of our work, and thus, we are also seeking an individual who has excellent communication skills. Please forward résumé to: **Human Resources:**

Exxon Biomedical Sciences, Inc.
CN 2350, Mettlers Road
East Millstone, NJ 08875-2350
Equal Opportunity Employer M/F/H/V

AMERICAN ASSOCIATION FOR CLINICAL CHEMISTRY, INC. EDITOR OF CLINICAL CHEMISTRY

The American Association for Clinical Chemistry, Inc., invites nominations for position of Editor of *Clinical Chemistry*, the world's leading journal in clinical laboratory science with a circulation of 15,000 and one of the 100 journals most frequently cited.

Candidates must hold the Ph.D. or M.D. degree and have broad knowledge of clinical chemistry and extensive experience in scientific and medical writing. The candidate should be familiar with experimental design and be able to judge the scientific validity and importance of research reports and review articles. The successful candidate will have a strong scientific record and the desire to expand and extend the scope of clinical chemistry. The candidates will have the decision-making skills associated with publishing and the ability to interact constructively with the scientific community.

Both full- and part-time candidates will be considered. Interested individuals should send a letter of application, curriculum vitae, reprints of two of their publications and the names of five individuals who could serve as references by 15 June 1989, to:

Theodore Peters, Jr., Ph.D., Chairman
Search Committee for Editor, *Clinical Chemistry*
American Association for Clinical Chemistry, Inc.
2029 K Street, N.W., Seventh Floor
Washington, DC 20006

FOUR FACULTY POSITIONS IN BIOLOGICAL SCIENCES

The Department of Biological Sciences at Western Michigan University invites applications for full-time, tenure-track positions at the assistant or associate professor level. Candidates should have a Ph.D. and postdoctoral experience. An active research program is necessary, either funded or with a clear potential for funding. Potential position starting dates include late August 1989; 1 January 1990; or late August 1990.

MICROBIOLOGY: virology/immunology preferred.

VERTEBRATE PHYSIOLOGY: comparative vertebrate physiology preferred.

ECOLOGY: population biology with expertise in chemical interactions or modeling and empirical study of biological diversity preferred.

SCIENCE EDUCATION: methods course expertise and ability to support Ph.D. program in Science Education preferred.

Send curriculum vitae, description of research program, and have three letters of recommendation sent to:

Dr. Robert Eisenberg for microbiology position
Dr. Cecil McIntire for physiology position
Dr. David Cowan for ecology position
Dr. Elwood Ehrle for science education position
Department of Biological Sciences
Western Michigan University
Kalamazoo, MI 49008

Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

FACULTY POSITION INSTITUTE FOR TOXICOLOGY UNIVERSITY OF SOUTHERN CALIFORNIA

Applications are invited for a tenure-track assistant/associate professorship in the School of Pharmacy. Outstanding candidates (chemists/biochemists) with research interests in the chemistry of excited states, reactive forms of oxygen, and quinonoid compounds are sought to join a multidisciplinary toxicological group. Participation in graduate teaching in biochemical toxicology and in professional program teaching in biomedical chemistry is required. Applicants should submit curriculum vitae and the names of three references by 28 April 1989 to: **Dr. Paul Hochstein, 1985 Zonal Avenue, Los Angeles, CA 90033. Equal Opportunity Employer/M/F/H.**

FACULTY POSITION— X-RAY CRYSTALLOGRAPHY

The Department of Biochemistry, Medical School at the University of Minnesota, invites applications for a tenure-track faculty position at the assistant or associate professor level. Candidates with professional distinction in research and writing and demonstrated effectiveness in teaching and advising will be considered for an associate professor position. Candidates demonstrating involvement in quality research accepted or published in peer-reviewed journals will be considered for an assistant professor position. Applicants should have a Ph.D. degree with expertise in x-ray crystallography and structural analysis of macromolecules. The successful applicant will be part of a group of scientists working in structural biology associated with the William F. Dietrich Chair program. The Structural Biology group complements a core of biophysical scientists in several departments in the Medical School and in the College of Biological Sciences. These departments maintain strong graduate programs in biophysics and molecular biology. The new opening includes ready access to state-of-the-art x-ray diffraction facilities and the Minnesota Supercomputer Institute.

Applications must be postmarked no later than 1 June 1989. Send curriculum vitae, a concise plan for future research, and the names of three references to: **Leonard J. Banaszak, Center for Structural Biology, Department of Biochemistry, Medical School, 4-225 Millard Hall, 435 Delaware Street, S.E., University of Minnesota, Minneapolis, MN 55455. The University of Minnesota is an Equal Opportunity Educational Employer, and specifically invites and encourages applications from women and minorities.**

FACULTY POSITION DIRECTOR, CYTOGENETICS LABORATORY MONTEFIORE MEDICAL CENTER AND ALBERT EINSTEIN CANCER CENTER

We invite applications for a faculty appointment at an appropriate level, and the directorship of the cytogenetics laboratory in the Albert Einstein Cancer Center. Responsibilities will focus on cytogenetic abnormalities in hematologic malignancies and solid tumors. The candidate must have a doctoral degree, experience in cytogenetics (preferably with certification in clinical cytogenetics), and research interest in molecular biology. To apply, send curriculum vitae and the names of three persons from whom recommendations can be solicited to: **Dr. Peter H. Wiernik, Department of Oncology, Montefiore Medical Center, 111 East 210th Street, Bronx, NY 10467.**

Montefiore Medical Center and Albert Einstein College of Medicine are Affirmative Action/Equal Opportunity Employers.

FACULTY POSITIONS—BIOCHEMISTRY CELL AND DEVELOPMENTAL BIOLOGY

The Department of Biochemistry, State University of New York at Stony Brook invites applications for junior or intermediate level, tenure-track faculty positions. The Department is greatly expanding its scope in the molecular aspects of cellular and developmental biology and is particularly interested in individuals with strengths in these or related areas. Send curriculum vitae, a summary of research interests and three letters from scientists familiar with the applicant's work to: **Dr. William J. Lennarz, Chairman-Designate, Department of Biochemistry, State University of New York at Stony Brook, Stony Brook, NY 11794-5215 by 1 August 1989. State University of New York at Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer.**

POSITIONS OPEN

FACULTY POSITIONS. University of Puerto Rico (UPR) Medical Sciences Campus. Accredited research and teaching institution with teaching in either Spanish or English will fill the following tenure-track positions in the next 2 years: **PHYSIOLOGY:** Four positions, rank open, in cell/systems physiology. **BIOCHEMISTRY:** Three positions: (i) Professor and Chair, (ii) Associate Professor with research in protein chemistry, (iii) Assistant Professor. **ANATOMY:** One position, rank and research area open, teaching in medical gross anatomy. **MICROBIOLOGY:** Two positions, Assistant Professor level: (i) molecular biologist, (ii) parasitologist with research in immunoparasitology or molecular biology of parasites. **ELECTRON MICROSCOPY:** Director of central EM unit. **NEUROBIOLOGY:** Two positions in biophysics or comparative electrophysiology. Applicants should send curriculum vitae, reprints, and the names and telephone numbers of three references to: **Dr. Susan Opava-Stitzer, Director, RCM Program, GPO Box 5067, UPR Medical Sciences Campus, San Juan, PR 00936.**

SYSTEMS NEUROSCIENCE, CELLULAR NEUROSCIENCE, MOLECULAR NEUROSCIENCE; FACULTY POSITIONS—Department of Neurobiology and Behavior—SUNY Stony Brook: The Department of Neurobiology and Behavior of SUNY Stony Brook is continuing its search for candidates for tenure-track, state-funded positions beginning as early as academic year 1989 to 1990. The Department, which currently consists of 15 members, is undergoing significant redevelopment, and has the resources to grow to 20 members within the next 5 years. Presently available positions are at the assistant professor level although an appointment at the rank of associate professor could be considered. Rank and competitive salaries will be commensurate with qualifications. All applicants should have a minimum of 2 years of postdoctoral experience. Candidates will be expected to develop a vigorous independent research program, and as such ample space and start-up funds will be provided. Applicants should submit curriculum vitae, statement of research interests, and names and addresses of three references to: **Dr. Lorne Mendell, Chairman, Department of Neurobiology and Behavior, SUNY Stony Brook, Stony Brook, NY 11794-5230. SUNY Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer. AK 60.**

HUMAN GENETICIST YALE SCHOOL OF MEDICINE

Applications are invited for a senior faculty position as Professor of Human Genetics and Director of the Human Gene Mapping Library (HGML), a computerized database of material relevant to mapping of human genes. Candidates should have a Ph.D., a distinguished record of scientific and administrative accomplishment in human genetics, demonstrated expertise in human gene mapping, and strong teaching experience in this area.

Please submit curriculum vitae and representative publications to:

Dr. Kenneth K. Kidd
Chairman, Faculty Search Committee
Department of Human Genetics
Yale University School of Medicine
P.O. Box 3333
New Haven, CT 06510

Applications must be received before 31 May 1989.

Yale University is an Equal Opportunity/
Affirmative Action Employer.

MOLECULAR BIOLOGY FACULTY POSITIONS. The Department of Biochemistry at Wayne State University School of Medicine invites applications for several tenure-track faculty positions. Research interests should encompass modern molecular approaches to basic problems of biology. The positions are at the level of assistant professor, although outstanding individuals at more senior levels will be considered. A Ph.D. or M.D. with relevant postdoctoral experience in molecular biology is required. A résumé, the names of at least three references, and a brief outline of future research interests should be sent to: **Dr. Barry P. Rosen, Professor and Chairman, Department of Biochemistry, Wayne State University, School of Medicine, Gordon H. Scott Hall of Basic Medical Sciences, 540 East Canfield Avenue, Detroit, MI 48201. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL SCIENTIST

Molecular Biologist / Virologist / Immunologist (recent Ph.D.) to develop recombinant DNA-based vaccine for dengue virus, a mosquito-borne agent responsible for high levels of morbidity throughout the tropics.

Duties will involve cDNA cloning, identification and characterization of viral sequences encoding viral protein epitopes recognized by human convalescent sera, incorporation of these sequences into vectors to generate immunogens, and analyzing sera elicited by these immunogens.

Please send your application, curriculum vitae, and the names, addresses, and phone numbers of three references to:



Dr. Tom Humphreys
Director of Research
Hawaii Biotechnology Group, Inc.
99-193 Alea Heights Drive
Honolulu, Hawaii 96701

An Equal Opportunity Employer

IMMUNOLOGIST / VIROLOGIST

Laboratory of Infectious Diseases
National Institute of Allergy and Infectious Diseases
National Institutes of Health

Position available immediately for qualified immunologist or virologist to work in the Respiratory Viruses Section, NIAID, NIH. Work will involve a detailed characterization of the cellular immune response to respiratory syncytial viruses (RSV) proteins and an investigation of the immunological mechanisms underlying the enhanced disease seen in recipients of inactivated virus vaccine following natural infection with RSV. A Ph.D. in immunology, virology or molecular biology is required.

Salary range: \$24,000 - \$27,000

Qualified and interested candidates should send curriculum vitae, Application for Federal Employment (SF-171) and names and addresses of three (3) references to:

Brian R. Murphy, M.D.
Head, Respiratory Viruses Section
NIAID, NIH
Bldg. 7, Room 106
9000 Rockville Pike
Bethesda, MD 20892

NIH is an Equal Opportunity Employer

Postdoctoral Researcher

XOMA Corporation, a leader in the development of targeted protein therapeutics, is seeking a postdoctoral fellow for the pharmacology group. The successful candidate will design, conduct and interpret pharmacological and pharmacokinetic studies with new products in development. The group is also responsible for the development of *in vivo* model systems for the evaluation of products to treat septic shock, immune-related diseases and cancer.

Candidates should have a Ph.D. in pharmacology or related discipline with extensive experience in the use of laboratory rodents for pharmacokinetic and pharmacological studies. Experience with immunological model systems, biostatistics, computer use and technical supervision desired. XOMA offers competitive salary and comprehensive benefits in an outstanding work environment. For consideration, please forward your C.V. & salary history to: Director of Human Resources, XOMA Corporation, 2910 Seventh Street, Berkeley, CA 94710. EOE.



XOMA
CORPORATION

Ph.D., Immunology/
Biochemistry/Molecular Biology

Postdoctoral Opportunities

The Squibb Institute for Medical Research is recognized as an international leader in the research and development of pharmaceuticals and related health care products. We are seeking to hire two Ph.D.'s in September 1989. Research is being conducted in the fields of molecular immunology and mammalian gene expression in hypertension models. If you have a Ph.D. in immunology, biochemistry or molecular biology, you may wish to consider one of these positions. Experience in expression of chimeric gene constructs, differential screening and analysis of gene structure is desired. For confidential consideration, please submit your curriculum vitae with three references to The Squibb Institute for Medical Research, Human Resources Department 508, P.O. Box 4000, Princeton, NJ 08543-4000. An equal opportunity employer.



SQUIBB[®]

Manager, QA Labs

For decades, Baxter Healthcare Corporation has been meeting the challenge of providing innovative, life-enhancing medical products and services throughout the world. Our Hyland Division specializes in the development, production and distribution of therapeutic proteins derived from human plasma.

We take pride in our educated, forward-thinking staff of professionals, and recognize their contributions toward improving the quality of life.

We currently seek an individual to manage and direct the activities of six Quality Control laboratories with combined budgets exceeding 2.3 million dollars. These laboratories perform analyses required for therapeutic product and raw material release, test development, manufacturing support, stability, and R&D programs. We require a Ph.D. or 8-10 years in the QC area; 5 years of QC experience in pertinent laboratory management; technical skills; educational background in Chemistry, Microbiology or Immunology; and management experience.

We believe that we provide the challenge that allows you to grow both professionally and personally in ways that you never thought possible. And those who meet the challenge will find reward and recognition in equal measure. **For consideration, send your resume to: Baxter Hyland Division, Human Resources Department, 4501 W. Colorado Blvd., Los Angeles, CA 90039. Equal Opportunity Employer.**

Hyland Division

Baxter

**DEPUTY DIRECTOR, OFFICE OF HEALTH &
ENVIRONMENTAL ASSESSMENT (OHEA)
DIRECTOR, HUMAN HEALTH ASSESSMENT
GROUP (HHAG)**

The U.S. Environmental Protection Agency (EPA) is seeking highly qualified candidates for two Senior Executive Service (SES) positions located at EPA Headquarters in Washington, D.C.

The OHEA oversees an Exposure Assessment Group and HHAG at Headquarters, Environmental Criteria Assessment Offices at Cincinnati, Ohio, and Research Triangle Park, North Carolina. OHEA is responsible for the technical direction and management of programs for assessing effects of environmental pollutants on human health and ecological systems, i.e., performing hazard assessments, developing risk assessment methods, guidelines, providing other forms of scientific advice to Agency regulatory offices, and planning/implementing research aimed at reducing uncertainty in risk assessment.

The Director, HHAG oversees four branches with emphases on toxicology, epidemiology, biostatistics, mechanisms of toxic action. HHAG provides the Agency with health hazard, risk information for use in regulatory decision-making with recommendations being defensible at national/international levels.

Applicants must have a bachelor's or higher degree in life or health sciences, or a related field relating to the work of the positions and professional experience demonstrating leadership and technical competence in one of those fields. Notable experience in human health risk assessment or in public health protection is desirable. Must meet the technical/executive qualifications described in Vacancy Announcement. For a copy of the Vacancy Announcement call or write: **Edna Morse, Environmental Protection Agency, Executive Resources and Special Programs Division, PM-224, 401 M Street, S.W., Washington, D.C. 20460.** The telephone number is (202) 382-3328.

Applications must be postmarked by June 1, 1989. A separate SF-171, Application for Federal Employment, *MUST* be submitted for each position.

EPA is an Equal Employment Opportunity Employer.

**PROFESSOR AND HEAD
DEPARTMENT OF ENTOMOLOGY**

Administer and coordinate faculty development and departmental teaching, research and extension programs. Provide leadership for development and implementation of programs within the department. Work with faculty to establish program priorities, faculty activities, allocation and management of support staff, facilities, and finances. Foster multidiscipline, interagency and regional cooperation.

The department has 22 faculty (16 UNL and 6 adjunct), 25 graduate students, and several technical support staff. Most faculty have joint appointments, consisting of research, teaching and/or extension. The department offers curricula leading to degrees of Bachelor of Science in crop protection, Master of Science or Doctor of Philosophy in entomology. Research programs include: insect physiology, ecology and genetics; biology and management of important insects associated with corn, sorghum, wheat, alfalfa, soybeans, livestock and range production; urban, forestry, water quality and pesticide impact assessment. The department is committed to increase basic biotechnological research while maintaining its traditionally strong production-oriented IPM programs on crop and livestock pests. Departmental research and extension programs are coordinated with those of faculty located at the five research and extension centers throughout the state.

Requires Ph.D. degree in Entomology and qualification to be full professor with tenure. Professional record must show significant accomplishments in research, teaching and/or extension. Must be familiar with the land grant university system and an appreciation of regional, national and international interaction is essential. Demonstrated ability to administrate, communicate and work harmoniously with people is required.

Nominations or applications will be accepted until May 15 (or until suitable applicant is identified). Applicants are requested to submit letter of application, vitae, and names of three references to:

**Dr. Irvin T. Omtvedt, Vice Chancellor
Institute of Agriculture & Natural Resources
University of Nebraska-Lincoln
202 Agricultural Hall
Lincoln, Nebraska 68583-0708
Phone: (402) 472-2871**

Affirmative Action/Equal Opportunity Employer

CHEMIST

**Ph.D. Clinical
Chemist**

Drug Safety Division - Wyeth-Ayerst Laboratories

Wyeth-Ayerst Laboratories has an immediate opening for a Ph.D. level Clinical Chemist to supervise a modern, well equipped clinical laboratory at our drug safety testing facility in upstate New York.

The candidate for this position should have previous experience with the Hematology clinical chemistry and biochemistry of the common laboratory species and with the adaptation of human testing procedures to the same. Of equal emphasis is a strong background in the use of computers in software packages within the lab for automation of procedures and as tools for the rapid interpretation of clinical results. The successful candidate will work on a cooperative basis with PhD level Toxicologists, Pathologists and Pharmacologists providing input regarding the significance of the clinical results and developing strategies to further elucidate the possible mechanism of drug toxicity.

Our drug safety testing facility is located between the foothills of the Adirondack Mountains and the shores of Lake Champlain. The area offers the benefits of a relaxed rural lifestyle and a wide range of outdoor recreational activities while being within easy driving distance of such cultural centers as Lake Placid, Burlington, Vermont and Montreal, Canada. Wyeth-Ayerst is an equal opportunity employer offering the successful candidate an attractive benefit package and a salary commensurate with experience. Send resume in confidence to:



**Gary D. Wagoner,
Personnel
WYETH-AYERST
LABORATORIES
Rouses Point,
New York, 12979**

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NEW YORK, N.Y. 10036**

PETROLOGY-GEOCHEMISTRY OF MINERAL DEPOSITS/AMERICAN MUSEUM OF NATURAL HISTORY

The Department of Mineral Sciences of the American Museum of Natural History invites applications for a tenure-track position as Assistant Curator of petrology and geochemistry of mineral deposits. We seek a creative scientist whose primary responsibility will be to carry out a vigorous research program related to mineral deposits. This research may have a structural/tectonic, theoretical or experimental approach to the study of ore deposits, but all should also be sample- and field-oriented. Collaboration with outside investigators to broaden the scope of research is encouraged. It is expected that the curator will supervise Ph.D. students in the AMNH-Columbia-CUNY Ph.D. program in geoscience and will develop relevant courses. The Museum is a repository for important research collections, and the curator is expected to develop significant ore deposit collections. Other duties include participation in departmental activities and occasional development of Museum exhibitions, seminars and courses.

The Department encompasses the fields of mineralogy, petrology, mineral deposits and meteoritics with 5 Ph.D. researchers; students, post-docs, research associates and support staff help with research and collections. Instrumentation includes a 9-spectrometer ARL-SEMQ microprobe with EDS, a Zeiss digital SEM with EDS, automated powder and single-crystal X-ray diffractometers, fluid inclusion and petrographic microscopes, sample preparation facilities and a network of microcomputers.

Applications should be submitted by May 15; the search will continue until a suitable candidate is found. Salary is competitive depending upon the experience of the candidate. Applicants must have a Ph.D. in hand (or nearly so) and should send a curriculum vitae, a succinct description of research interests and the names of three references to:

Dr. George E. Harlow
Chairman, Search Committee
Department of Mineral Sciences
American Museum of Natural History
Central Park West at 79 Street
New York, NY 10024-5192
(212) 769-5378

An equal opportunity employer.

Postdoctoral Research Fellowships

The Plant Biochemistry Department at Zoecon Research Institute (ZRI) is seeking to fill two postdoctoral research positions in the area of auxin binding/auxin transport.

Protein Biochemistry: Responsible for characterizing a membrane protein identified as the efflux carrier of indole acetic acid (auxin). Candidate must have experience in protein biochemistry including protein sequencing, peptide mapping and covalent modification of proteins. Experience with plants and membrane associated proteins preferred, but not required.

Molecular Biologist: Responsible for identifying and sequencing gene(s) responsible for synthesis of the auxin efflux carrier in higher plants. Candidate must have a strong background and experience in plant molecular biology including DNA sequencing. Special consideration will be given to candidates with experience on oligonucleotide hybridization techniques.

ZRI has been a leader in innovative agricultural research for more than 20 years and has established research programs in herbicide design, plant biotechnology, insect physiology/biochemistry and chemistry. Excellent research facilities are located in Palo Alto, in proximity to Stanford University. Research is conducted in an open and interactive environment. Postdoctoral fellows are encouraged to publish their results & establish contact with other scientists throughout the world.

To apply for this position, please send curriculum vitae and the names of three references to:

**SANDOZ CROP
PROTECTION CORPORATION**
Zoecon Research Institute
Human Resources Department
975 California Avenue
Palo Alto, CA 94304
AA/EOE



Dean College of Pharmacy and Allied Health Professions Northeastern University Boston, Massachusetts

Northeastern University, a large urban university, invites applications and nominations for the position of Dean of the College of Pharmacy and Allied Health Professions. The College includes undergraduate programs in health records administration, medical laboratory science, pharmacy, respiratory therapy and toxicology. Graduate programs in the College of Pharmacy and Allied Health Professions range from biomedical sciences to medically related professional programs. Biomedical sciences include M.S. and Ph.D. degree programs in medical laboratory sciences, medicinal chemistry, pharmaceuticals, pharmacology, and toxicology. The professional programs include those leading to the M.S. degree in hospital pharmacy, the Master of Health Professions with specialization as physician assistants, and the Doctor of Pharmacy Degree, as well as a post-baccalaureate certificate program in perfusion technology.

The Dean is the chief academic and executive officer of the College, reporting to the Provost. The Dean is primarily responsible for maintaining high quality undergraduate and graduate programs and for providing leadership to enhance the continued growth of research activities in the College. The Dean is expected to be an articulate spokesperson for the College and a liaison with the health professions and related industries.

Candidates should possess an earned Ph.D., or equivalent, in a pharmaceutical or allied health science, or a related discipline, and an outstanding record of research, teaching and scholarship. Experience in academic administration, including budgeting and financial planning, and the ability to communicate and deal effectively with students, faculty, administration and industry are essential.

Applicants should submit a complete resume including vita, list of publications, and the names and addresses of three references. Application or nomination received by May 31, 1989 will be given full consideration. All materials, including nomination and inquiries, should be directed to Professor Patrick F. Plunkett, Chair, Dean Search Committee, 238 Mugar Life Sciences Building, Northeastern University, Boston, Massachusetts 02115. Northeastern is an Equal Opportunity/Affirmative Action, Title IX University.

 **Northeastern University**

POSITIONS OPEN

UNIVERSITY OF HONG KONG LECTURER IN BIOCHEMISTRY

Applications are invited for a Lectureship in the Department of Biochemistry. The appointee will participate in the teaching of students in the Faculties of Medicine, Science and Dentistry. Present research activities in the Department include molecular biology, membrane, developmental and neuro biochemistry, enzymology, immunology and haematology. Consideration will be given to applicants from any field of research. Those who are interested in contributing to the teaching of human genetics or lipid biochemistry are encouraged to apply. A higher degree is normally expected and some teaching experience is desirable. Applicants with medical or dental qualifications may have an advantage.

Annual salary (superannuable) is on an 11-point scale: US\$1 = HK\$7.80 (approximately 15,260 to 25,510 sterling equivalent as at 3 March 1989). Starting salary will depend on qualifications and experience. A medically qualified appointee who has just completed his/her pre-registration year will be appointed as Lecturer at the minimum point of the scale. At current rates, salaries tax will not exceed 15.5% of gross income. Children's education allowances, leave, and medical benefits are provided; housing or tenancy allowances are also provided in most cases at a charge of 7.5% of salary.

Further particulars and application forms may be obtained from: **Appointments (36160), Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF, U.K.**, or from: **The Appointments Unit, Registry, University of Hong Kong, Hong Kong**. Closing date: 9 June 1989.

MAGNETIC RESONANCE SPECTROSCOPIST.

Applications are invited for a non-tenure-track position as research assistant professor in the Department of Biochemistry, University of Virginia. Applicants for this position must be expert in the theory of magnetic resonance spectroscopy and in the application of these techniques to lipid bilayers and biological membranes. They must also have extensive experience in the synthesis of phospho- and sphingolipids and other complex membrane lipids. The position will require advanced graduate level teaching of the theory and applications of magnetic resonance spectroscopy. Applicants must hold a Ph.D. degree and have at least 4 years of postdoctoral research experience. Curriculum vitae, copies of academic transcripts and three letters of recommendation should be sent to: **Professor T. E. Thompson, Department of Biochemistry, The University of Virginia, Charlottesville, VA 22908**. Applications should be postmarked on or before 11 May 1989. *Affirmative Action/Equal Opportunity Employer.*

MOLECULAR AND CELLULAR BIOPHYSICS CORNELL UNIVERSITY POSTDOCTORAL RESEARCH ASSOCIATE

Research in cellular biophysics and molecular cell biology, particularly on cell surface receptor dynamics and transmembrane signalling mechanisms utilizing the facilities of our Development Resource for Biophysical Imaging and Optoelectronics. Current group interests include F_c receptors, lipoprotein receptors, intramembrane receptor interactions, conformational transformations and mechano-ceptor mechanisms. The position includes some service as a cell biological and biochemical consultant for the Resource, and collaboration with its multidisciplinary users and collaborators and its largely biophysical staff. For measurements on cells in culture available technologies include the latest developments in quantitative electro-optical and confocal microscopic image acquisition, digital image analysis, picometer sensitivity interferometry, fluorescence photolysis and photobleaching photochemistry, and fluorescent photochemical indicators of cellular electrochemistry. Supporting facilities for tissue and cell culture, biotechnology, molecular biology, analytical biochemistry and physical and computer services are available.

Position appropriate for biophysical chemist, molecular cell biologist, cellular biophysicist or biochemist with background capability for interdisciplinary research and motivation to learn biophysical technologies.

Send résumé, statement of research interests, names of three referees or letters of recommendation to: **Professor Watt W. Webb, Cornell University, Applied Physics, Clark Hall, Ithaca, NY 14853-2501**. *Cornell University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

KING'S COLLEGE LONDON UNIVERSITY OF LONDON BIOMEDICAL SCIENCES DIVISION LECTURESHP IN ANATOMY AND HUMAN BIOLOGY

Applications are invited for the post of Lecturer in Anatomy and Human Biology. Applicants should have active research interests in, for example, cell biology, developmental biology, neurobiology, or some other appropriate field, and be prepared to participate in the teaching of science, medical, and dental curricula. Experience in human topographical anatomy teaching, while desirable, is not essential.

Salary on scale Lecturer A £9,260 to £14,500 per annum plus £1,650 London allowance or Lecturer B £14,105 to £19,310 per annum plus London allowance according to age, experience, etc.

For further details, contact: **Professor K. E. Webster, Anatomy and Human Biology, King's College London, Strand, London WC2R 2LS (telephone: 01-873-2484)**, to whom completed applications should be returned by 30 April 1989.

POSITION FOR MOLECULAR BIOLOGIST/GENETICIST

The Molecular Genetics Department of Northrup King Co. is recruiting an M.S. level molecular biologist/geneticist to conduct research with molecular markers (i.e., isozymes, RFLPs, etc.) in field and sweet corn. Experience in Southern blotting and plasmid preparation as well as a fundamental understanding of genetics is required. Computer knowledge and familiarity with DNA sequencing and PCR technology desirable. The position will be located at the Northrup King Research Center, Stanton, Minnesota; and starting salary will be commensurate with experience/accomplishments.

Send application/résumés to:

**Dr. Ed Weck
Northrup King Co.
Research Center
Highway 19
Stanton, MN 55081
Telephone: 507-663-7643**

U.S. ARMS CONTROL AND DISARMAMENT AGENCY (ACDA) PHYSICAL SCIENTIST, GS-13/14 \$41,599 to \$63,172

The U.S. Arms Control and Disarmament Agency is seeking a physical scientist at the GS-13/14 level for its Verification Division to serve as a staff specialist and expert in conducting important technical analysis relating to verification aspects of arms control treaties. The successful candidate for this position should combine a strong scientific background with an interest in foreign policy applications especially in arms control. This person will assume the role of verification staff expert and will provide technical and scientific analysis, support, and representation to the various complex verification regimes which have emerged as a result of the INF Treaty. Ideally, applicants will combine an understanding of scientific and engineering principles and of political decision-making, especially in the area of arms control. U.S. citizenship and Top Secret level security clearance by ACDA are required before entry on duty. Applicants should contact: **Mr. Wiles 202-647-2034** for a vacancy announcement and submit form SF-171 before 21 April 1989.

PERINATAL ANATOMIST

Full-time permanent position available immediately in the Pathology Department of a West Coast pediatric hospital for ongoing research project concerned with pregnancy loss and fetal and neonatal death. Primary responsibilities include performance of detailed post-mortem studies on second and third trimester stillborn fetuses. Will act as part of an interdisciplinary team including a pathologist, geneticist, cytogeneticist and radiologist. Additional duties to include general anatomic pathology responsibilities.

Applicants should have a graduate degree in an applicable field. To apply, send curriculum vitae and names and telephone numbers of three references (postmarked no later than 5 May 1989) to:

Box 50, SCIENCE

POSITIONS OPEN

MOLECULAR IMMUNOLOGIST BRANDEIS UNIVERSITY

The Rosenstiel Research Center and the Department of Biology, seek a tenure-track assistant professor in the area of the molecular biology of the immune system. Candidates should have a strong record of research accomplishments in this area. Exceptional individuals at a more senior level will also be considered. Please submit curriculum vitae, including a description of research goals, and the names of three individuals who can supply letters of recommendation to: **Molecular Immunology Search Committee, Rosenstiel Center, Brandeis University, Post Office Box 9110, Waltham, MA 02254-9110**, by 15 June 1989. *Brandeis University is an Equal Opportunity/Affirmative Action Employer.*

PESTICIDE TOXICOLOGIST/ENTOMOLOGIST: The Department of Entomology, Washington State University invites applications and nominations for a research, tenure-track, assistant entomologist position located at Puyallup, Washington. Conduct research on the movement of pesticides in the vegetable crop ecosystem of western Washington (additional information available upon request). Ph.D. required, preferably in entomology. Candidates with Ph.D. in toxicology (or a related science) with expertise in pesticide toxicology will also be considered. Applications accepted through 1 June 1989. Send letter of application, statement of professional goals and research plan, curriculum vitae including a list of all publications, descriptions of research experience and goals, and a list including telephone numbers of five referees to: **John J. Brown, Chair Search Committee, Department of Entomology, Washington State University, Pullman, WA 99164-6432**. *WSU is an Equal Opportunity/Affirmative Action Educator and Employer. Protected group members are encouraged to apply.*

PHYSICIST, Assistant professor, tenure-track, recent Ph.D., with background in electron optical research, particularly electron energy loss spectroscopy and interest in biological applications. Opportunity also for participating in research involving confocal microscopy and microspectrophotometry. Appointment is to be made in the Department of Physiology: the Appointee will be encouraged to develop and maintain ties with the Department of Physics and/or Materials Science. The position is suited for individuals desirous of developing an independent research program as well as collaborating with cellular biophysicists in the development and application of electron and light optical methods to problems of cell biophysics. A good grasp of theory, as well as instrumentation, is required. *The University of Virginia is an Equal Opportunity Employer.*

Please furnish curriculum vitae and résumé to: **Dr. A. P. Somlyo, Chairman, Department of Physiology, Box 449, University of Virginia, Charlottesville, VA 22908**.

POSTDOCTORAL AND RESEARCH ASSOCIATE POSITIONS available immediately for highly qualified individuals to study animal (murine leukemia virus) and human (HIV) retroviruses. Projects include development and mechanistic studies of antiviral drugs, isolation of rodent and human monoclonal antibodies against viral proteins and characterization of structure and function of viral gene products by site-specific mutagenesis. Salary will be commensurate with experience. Send curriculum vitae and names of three references to:

**Dr. Abraham Pinter
Department of Retroviral Biology
Public Health Research Institute
455 First Avenue
New York, NY 10016**

POSTDOCTORAL FELLOW: A position is available immediately to study the structure and hormonal control of eukaryotic genes. The NIH-funded projects involve in vivo and in vitro experiments to delineate mechanisms by which androgenic steroids regulate expression of specific genes in the target tissues. Applicants must have a Ph.D. or M.D. degree with training in reproductive endocrinology and experience with recombinant DNA or protein purification techniques. Send curriculum vitae and names and addresses of three references to: **Dr. Olli A. Janne, Associate Division Director, Center for Biomedical Research, The Population Council, 1230 York Avenue, New York, NY 10021**.

POSITIONS OPEN

**AGRICULTURAL RESEARCH SERVICE
(ARS)
U.S. DEPARTMENT OF AGRICULTURE
(USDA)
PLANT PATHOLOGIST
NORTHERN REGIONAL RESEARCH
CENTER, PEORIA, ILLINOIS**

ARS is seeking a candidate to join a research group studying the conversion of agricultural commodities into biocontrol products. Specifically, to conduct research on culturing fungal plant pathogens for the production of spores which can be used for the control of noxious weeds. Candidates must have knowledge of plant pathology and mycology. Knowledge and experience with microscopy and tissue-culture are desirable. A Ph.D. is desirable. *U.S. citizenship is required.* Salary is commensurate with experience, \$28,852 to \$44,957. For information on the research program, contact: **Dr. R. J. Bothast; 309-685-4011.** For information on application procedures, contact: **Ms. Janie Carr; 301-344-4569.** Applications in response to this advertisement must be marked 9N007 and be received by 1 June 1989. ARS is an Equal Opportunity Employer.

**POSTDOCTORAL FELLOW AND
RESEARCH ASSOCIATE**

Positions available July 1989 to study the genetics of atherosclerosis in the mouse including the impact of obesity and diabetes. Knowledge of lipoproteins or nutrition useful. Position at The Jackson Laboratory, Bar Harbor, Maine, but send résumé and names of three references to: **Dr. Beverly Paigen, Children's Hospital, 747 52nd Street, Oakland, CA 94609.** Telephone: 415-428-3524.

**POSTDOCTORAL FELLOW(S) OR
RESEARCH SCIENTIST(S)
ANIMAL RETROVIRUS
RESEARCH LABORATORY
COLORADO STATE UNIVERSITY**

One to two Ph.D. scientists with expertise in modern virology and/or immunology are sought to participate in research into the mechanisms, pathogenesis, and innovative therapies of retrovirus infection and associated immunodeficiency syndrome and bone marrow failure in animals. Model systems under study include the feline and simian lentiviruses and the feline leukemia viruses. Salary commensurate with credentials.

Deadline: 1 June 1989.

Please send application materials to: **Dr. Edward A. Hoover, Professor, Department of Pathology, Colorado State University, Fort Collins, CO 80523.** Telephone: 303-491-7861.

Colorado State University is an Equal Opportunity/Affirmative Action Employer and complies with all Federal and Colorado State laws, regulations, and executive orders regarding Affirmative Action requirements.

**UNIVERSITY OF ZURICH,
SWITZERLAND
POSTDOCTORAL FELLOWSHIP
IN
MOLECULAR BIOLOGY**

An enthusiastic postdoctoral scientist preferably with experience in the areas of cloning, gene transfer or site-directed mutagenesis, is required to join a multi-disciplinary team actively involved in research on chemically gated ion channels in the central nervous system [see *Proc. Natl. Acad. Sci.* 85, 7815 (1988)]. The current project aims to study the role of the GABA-receptor in regulating anxiety, vigilance and epileptic seizures. Investigation will focus on the structural heterogeneity, functional divergence and regulation of gene expression of this receptor family in normal and diseased brain. Applicants for the 3-year post, now available, should send curriculum vitae, list of publications, and the names of three references to: **Professor H. Mohler, Neuroscience Department, Gloriastr. 32, CH 8006 Zurich, Switzerland.**

MEDICINAL CHEMIST Peptide Design & Synthesis

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TO
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EXCELLENCE



The Sterling Research Group, the worldwide pharmaceutical research and development organization of Sterling Drug Inc., announces an opening for a Medicinal/Organic Chemist in the Medicinal Chemistry Department of its Rensselaer, New York facility.

An excellent opportunity exists for an organic chemist who has experience in the synthesis of peptides to join an expanding group committed to the discovery of peptides and peptide mimetics as potential therapeutics. Experience in solid-phase peptide synthesis would be an advantage.

The successful candidate will have a doctoral degree in chemistry or a related discipline.

Sterling offers competitive salaries and a comprehensive benefits program, along with outstanding career opportunities for personal and professional growth. For confidential consideration, please forward your resume with salary history/requirements to:

**Jo Ann Fitzgerald
Employee Relations Administrator**

STERLING RESEARCH GROUP

A Division of Sterling Drug Inc.
81 Columbia Turnpike
Rensselaer, NY 12144

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Equal Opportunity Employer M/F/H/V

Syntex, an international leader in the pharmaceutical and health care industries, has immediate openings available in our Palo Alto research headquarters for:

Department Head

You'll provide scientific leadership in areas of neurobiology, neuro-chemistry and psychopharmacology. Screen and develop novel therapeutic agents, define and execute departmental goals and administer the departmental budget. Applicants must have a PhD in pharmacology, 8+ years' related experience and a strong background in CNS neurotransmitter receptors and behavioral pharmacology.

Post Doctoral Fellowships

Pharmacology

Investigate the pharmacology and physiology of 5HT receptor subtypes and neuronal function in the CNS and

periphery. Applicants must possess a strong background in receptor theory and be familiar with both radioligand binding and cell culture techniques.

Molecular Biology

Study the 5HT and muscarinic receptor subtypes using cloning and expression techniques. Applicants must have a strong background and interest in receptor cloning methodology, including mRNA isolation and transfection techniques.

Openings are also available for PhD Pharmacologists in gastro-intestinal and cardiovascular research and for a PhD in cellular and soluble hemostasis.

Syntex offers a competitive compensation package in campus-like surroundings. For immediate consideration, please send your resume, indicating position of interest to: Syntex, Professional Staffing, Dept. SH/EP, 3401 Hillview Avenue, Palo Alto, CA 94304. Syntex is an equal opportunity employer.



POSITIONS OPEN

POSTDOCTORAL OPPORTUNITIES IN MOLECULAR BIOLOGY AND MOLECULAR GENETICS AT THE NATIONAL INSTITUTES OF HEALTH

The Laboratory of Molecular Otolology of the Intramural Research Program of the National Institute on Deafness and Other Communication Disorders, National Institutes of Health, Bethesda, Maryland, has several openings for fellowships. Applications are invited from scientists having a Ph.D. and/or M.D. degree. These postdoctoral fellowships are available to study (i) the molecular biology of the auditory system or (ii) the molecular genetics of inherited hearing impairments. Experience in molecular biology, molecular genetics, biochemistry or cell biology is desirable. Salary ranges from \$24,000 to \$50,744 and depends on experience and qualifications, as does the rank of the positions. Further appointment requirements may be obtained by calling Ms. Chris Steyer at: 301-496-6334. Please arrange to send curriculum vitae and three letters of reference to: **Dr. Jorgen Fex, Laboratory of Molecular Otolology, National Institute on Deafness and Other Communication Disorders, National Institutes of Health, Public Health Service, Building 36, Room 5D08, 9000 Rockville Pike, Bethesda, MD 20892.**

NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITION for research on mammalian germ cells and embryo development using transgenic mouse models. Apply with curriculum vitae to: **Dr. R. L. Brinster, School of Veterinary Medicine, University of Pennsylvania, Philadelphia, PA 19104.**

POSTDOCTORAL POSITION available in the field of photosynthesis. Studies will involve biochemical and molecular biological techniques as applied to the structure, function and biogenesis of photosynthetic membrane electron transfer complexes. Prior experience with membrane proteins is highly desirable. Send curriculum vitae and references to: **Dr. Richard Malkin, 309 Hilgard Hall, University of California, Berkeley, CA 94720.**

POSITIONS OPEN

POSTDOCTORAL POSITION: Molecular modeling and dynamics simulations of enzyme structure/function and design. Facilities include academic and commercial software, ES 390, VAXs, Convex, workstations, and generous CRAY time. Publication and attendance at scientific meetings will be encouraged. Ph.D. and U.S. citizenship required. Send résumé to: **Anthony F. Gasperino, Battelle, Pacific Northwest Laboratories, P.O. Box 999, Department 102, Richland, WA 99352.** Position will start autumn 1989. *Battelle is an Equal Opportunity Employer.*

POSTDOCTORAL POSITION— BAYLOR COLLEGE OF MEDICINE

A postdoctoral position is available to study the regulation of expression and function of vimentin and desmin in transgenic mice. Send curriculum vitae and three references to: **Dr. Semie Capetanaki, Department of Cell Biology, Baylor College of Medicine, Houston, TX 77030.**

POSTDOCTORAL POSITION to study the genetic and dietary control of metabolic pathways of alcohol degradation in *Drosophila*. The research involves enzyme analysis, radiotracer analysis of metabolic flux and genetic analysis of *Drosophila* maintained on defined media. Background in biochemistry and molecular biology preferred. Work with good undergraduates; some teaching possible. Funding for 3 years with salary of \$23,000 to \$25,000. Send curriculum vitae, research experience and three letters of recommendation to: **Dr. Billy W. Geer, Department of Biology, Knox College, Galesburg, IL 61401.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION. To examine the role of protein kinase C and the *jun* oncogene in cell transformation. Experience in molecular biology (site-directed mutagenesis, S1 nuclease assay etc.) is necessary. Salary to \$28,000 commensurate with experience. Write: **Dr. A. Kraft, Division of Hematology/Oncology, University of Alabama Birmingham, 513 T.H.T. 1900 University Boulevard, Birmingham, AL 35294.**

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately to join an NIH-funded investigation of the regulation of epithelial cell junctions and transepithelial permeability by protein kinases. Candidates should have a recent Ph.D.; a background in epithelial biology or protein kinases biochemistry is preferred. Send curriculum vitae and the names of three references to: **Dr. James M. Mullin, The Lankenau Medical Research Center, Lancaster Avenue, West of City Line, Philadelphia, PA 19151-0598.** *Equal Opportunity Employer.*

POSTDOCTORAL POSITION: Available immediately in a multidisciplinary neuroendocrine group at Massachusetts General Hospital-Harvard Medical School to study hormone gene regulation and pathogenesis of human pituitary tumors. Opportunity for Ph.D. with molecular biology experience. Send curriculum vitae and three letters of reference to: **Dr. Anne Klibanski, Massachusetts General Hospital, ACC-630, Parkman Street, Boston, MA 02114.** *An Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION available to study the control of hormone secretion by utilizing methods that enable analysis at the level of the single cell. Experience in cell culture, immunocytochemistry, in situ hybridization and plaque assays desirable but not required. Send curriculum vitae and the names of at least three references to: **Dr. F. R. Boockfor, Department of Anatomy and Cell Biology, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.**

POSTDOCTORAL POSITION to investigate the cytotoxic pathways of bacterial toxins and human tumor necrosis factor. Experience in protein-membrane interactions, nucleic acid-protein biochemistry, and/or tissue culture preferred. Send résumé and three reference letters to:

Dr. B. J. Wisniewski
Department of Microbiology and The Molecular
Biology Institute, University of California
Los Angeles, CA 90024

RESEARCH SCIENTIST DRUG METABOLISM

Wyeth-Ayerst Research, a subsidiary of Fortune 100 American Home Products Corporation, has an opening for a Ph.D. Scientist in its Drug Disposition Section of Drug Metabolism.

The primary responsibilities will be to plan and implement studies on the absorption, distribution, metabolism and excretion of foreign compounds; pharmacokinetic evaluations and interpretation; isolation and structure elucidation of metabolites and handling of radioactive (carbon-14 and tritium) isotopes. The successful candidate will be involved in the development and validation of analytical procedures to assay foreign compounds in biological fluids.

A Ph.D. in a biological or physical science with at least 3 years post-doctoral experience is required. Previous supervisory experience along with strong oral and written communication skills are essential.

Wyeth-Ayerst offers an excellent salary and benefits package plus opportunity for advancement along with an ultra-modern research facility. Interested candidates should send CV and salary history to:

Personnel Manager, Dept. 2562



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Equal Opportunity Employer M/F/H/V

Computer Science Positions

Inter American University of Puerto Rico - Department of Business Administration - invites applications for three (3) Visiting Professors of Computer Science positions on a full time basis for undergraduate teaching. The teaching will be conducted in Spanish. Candidates must have a M.S. in Computer Sciences, Information Systems Engineering, or Manufacturing Engineering and have college level teaching experience of three (3) years minimum. Starting salary of \$16,560.00.

Deadline for applications will be one month after publication. Send resume and academic credentials to: Dean of Academic Affairs - Inter American University of Puerto Rico, San Germán Campus, Luna St., San Germán, Puerto Rico 00753.



**Inter American
University of Puerto Rico**

BIOTECHNOLOGY

FORMULATION SCIENTIST

Cetus Corporation, a leader in the development of biotechnology-based therapeutics for cancer and infectious diseases, is seeking a Protein Chemist to work in our Formulation Group and assist in the development of stable formulations for therapeutic proteins. You will be involved in the development of assays to assess the physical and chemical stability of proteins and apply this knowledge to the development of appropriate clinical dosage forms.

Requirements include a PhD in Biochemistry or a related field and experience with modern techniques of protein analysis. Additionally, you should be able to work as part of a project team, as well as to communicate effectively. One to two years of industrial experience is desired, but not required.

Cetus offers an excellent benefits package along with an environment that encourages innovation and growth. For consideration, please send your resume to Cetus Corporation, Box JTS, 1400 Fifty-Third Street, Emeryville, CA 94608. We are an Equal Opportunity Employer.



Postdoctoral Scientist

Lawrence Livermore National Laboratory has an exciting opportunity available for a Postdoctoral Scientist in our Biomedical Sciences Division.

The selected candidate will join a team studying the formation and metabolism of aromatic amine carcinogens and mutagens formed in meats by cooking. Specific research will involve identifying the active metabolites and DNA/protein adducts formed in humans by dietary ingestion of the aromatic amines.

Requirements include a PhD and experience with P450 mediated metabolism of genotoxic agents, aromatic amine toxicology, HPLC and immunoaffinity chromatography.

We offer a highly competitive salary and benefits package. Questions may be directed to Dr. Martin Vanderlaan at (415) 422-5721, or send your curriculum vitae to: Earl G. Morrell, Personnel Operations Division, Lawrence Livermore National Laboratory, P.O. Box 5510, L-725, Dept. KSC47902B, Livermore, CA 94550. U.S. citizenship desired. An equal opportunity employer.

University of California



SCIENCE PROFESSIONALS

The Lockheed Engineering & Sciences Company supplies management and technological resources to many government agencies and major corporations. The Western Programs Office of Lockheed is currently seeking a Science Department Manager as well as Experiment Support Scientists for its Flight Payload Integration contract with NASA. Located at Ames Research Center in Mountain View, CA, this work involves support to the Space Life Sciences Project Office in development, integration, and operations aspects of space flight biological sciences experimentation. The Manager heads a staff of approximately 15 life scientists who assist in integrating the requirements of a large number of principal investigators with hardware and mission constraints and capabilities. This requires close and continuing collaboration with the investigators, NASA scientists, and engineering staff.

The successful candidate for Science Department Manager would have an advanced degree, preferably a PhD, in one of the life sciences disciplines and would have a number of years of laboratory or project supervisory experience. He/she should enjoy professional recognition in his/her field as evidenced by a body of publications and participation in national and international meetings and panels.

Experiment Support Scientist positions require a BA or higher degree in a biological discipline. Research interests and experience should be reflected by publication record, or, if a recent graduate, by courses taken. Computer literacy, writing ability, and laboratory instrumentation/hardware experience are desirable attributes.

Forward curriculum vitae and telephone numbers of two references to Dr. Kenton Bentley, Manager, Western Programs Office, Lockheed Engineering & Sciences Company, P.O. Box 168, Moffett Field, CA 94035. We are an equal opportunity, affirmative action employer.



POSITIONS OPEN

POSTDOCTORAL POSITION available immediately for research on structural analysis of DNA conformation and interaction with drugs and other ligands. Techniques for analysis include UV, fluorescence and circular dichroism as well as 1D and 2D NMR. Previous experience with nucleic acids is preferred. Send curriculum vitae and three letters of reference to: **Professor R. H. Shafer, Department of Pharmaceutical Chemistry, Box 0446, University of California, San Francisco, CA 94143.** UCSF is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION

Study the cellular basis for auditory information processing and synaptic organization of auditory brainstem. Use axonal transport, EM autoradiography, EM immunocytochemistry, electrophysiology, and intracellular staining. Participate in high-tech program to use image processing and 3D-computer graphics in neuroanatomy. Ph.D. in neurobiology or equivalent required plus experience in neuroanatomy, EM, or neurophysiology. Salary at NIH levels. To apply, send curriculum vitae and references to: **Dr. Douglas L. Oliver, Department of Anatomy, University of Connecticut Health Center, Farmington, CT 06032.** Deadline 5 May 1989. An Affirmative Action/Equal Opportunity Employer M/W/H.

POSTDOCTORAL POSITION to study enzymology and molecular biology of human nucleotide excision repair. Experience in nucleic acids, cloning and/or enzyme purification is required. **Dr. Aziz Sancar, University of North Carolina, Department of Biochemistry, CB#7260, Chapel Hill, NC 27599-7260.** Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION to study the reaction mechanism of DNA Photolyase. The enzyme contains DAD and folate cofactors and persons with experience with flavo-enzyme or folate biochemistry are preferred. Background in enzymology is essential. **Dr. Aziz Sancar, University of North Carolina, Department of Biochemistry, CB#7260, Chapel Hill, NC 27599-7260.** Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION: Immediate opening to study transcription of plant genes using in vitro plant systems. Applicant should have knowledge and/or experience in either protein chemistry, in vitro systems or plants. Salary competitive. Send curriculum vitae, a brief description of research experience, copies of publications and names of three references by 28 April 1989 to: **Dr. Steven Ackerman, Department of Biology, University of Massachusetts, Boston, MA 02125.** Telephone: 617-929-8427. An Affirmative Action/Equal Opportunity/Title IX Employer.

POSTDOCTORAL POSITION IN CELLULAR/MOLECULAR PHARMACOLOGY

Position is available to study mechanisms of coupling of muscarinic receptors to second messenger systems including phosphoinositides, cyclic nucleotides and calcium signaling in addition to cloning novel muscarinic receptors and determination of the level of muscarinic receptor mRNA upon different pharmacological manipulations. Please send curriculum vitae and names of three references including their addresses and telephone numbers to: **Dr. Esam E. El-Fakahany, Department of Pharmacology and Toxicology, University of Maryland School of Pharmacy, 20 North Pine Street, Baltimore, MD 21201.**

An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION IN MOLECULAR PARASITOLOGY

Available immediately for studies on the mechanisms of action of several antimalarial drugs, including recently recognized in this laboratory as the prototype of a new class of anti-malarial agents. A strong background in biochemistry and enzymology, with some knowledge of molecular genetics is required. Further details are available and candidate should send curriculum vitae and names of three references to:

**Professor Richard M. Franklin
Biocenter—University of Basel
Klingelbergstrasse 70
CH-4056 Basel/Switzerland**

POSITIONS OPEN

POSTDOCTORAL POSITION NEUROPHYSIOLOGY

Applications are invited for a postdoctoral position concerning projects with ion-selective microelectrode techniques on cultured astrocytes and neurons. Applicants should have a background in neurophysiology and experience with electrophysiological recording. Salary will be on MRC (Canada) scales. Applications including curriculum vitae and names of three referees should be sent to: **Dr. Wolfgang Walz, Department of Physiology, College of Medicine, University of Saskatchewan, Saskatoon, Saskatchewan, S7N 0W0 Canada.**

POSTDOCTORAL POSITIONS available immediately, in two independent research groups, for two biochemists/molecular biologists to participate in studies of gene regulation and signal transduction by receptors for steroid hormones or growth factors. Projects involve molecular and genetic analyses of intracellular or membrane receptor structure and function. Previous experience with protein analysis and recombinant DNA techniques is desired. Salary is negotiable, depending upon experience. Send curriculum vitae, statement of interests and names of three references to: **Dr. Geoffrey L. Greene or Dr. Marsha R. Rosner, Ben May Institute—Box 424, The University of Chicago, 5841 South Maryland Avenue, Chicago, IL 60637.** Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS

Three postdoctoral positions available immediately in the Laboratory of Viral Diseases, NIAID. **Dr. Bernard Moss**, Laboratory Chief. Studies include (i) Biosynthesis, assembly, and transport of HIV proteins using monoclonal antibodies [Dr. Jonathan Yewdell, see *Cell* 52, 843 (1988)] and (ii) CD4/gp120 interactions and the design of CD4-based targeted AIDS therapeutics [Dr. Edward Berger, see *Nature*, 335, 369 (1988)]. Experience in hybridoma technology, protein chemistry, genetic engineering, or HIV virology preferred but not required. Starting salary commensurate with experience. Curriculum vitae and four letters of reference to:

**Dr. Jonathan Yewdell
NIAID, Twinbrook II
12441 Parklawn Drive
Rockville, MD 20852 or
Dr. Edward Berger
NIAID, NIH
Building 4, Room 232
9000 Rockville Pike
Bethesda, MD 20892**

NIH is an Equal Opportunity Employer.

PRODUCT MANAGER

Promega Corporation, headquartered in Madison, Wisconsin, and a leading manufacturer of molecular biological products for research and industrial scientists, is seeking a talented individual for the position of product manager.

Major responsibilities involve advertising and promotion of current products as well as assistance in the identification of new products and product line extensions to Promega's product line. This position will be responsible for competitive comparisons, sales aids, trade show planning and coordination, product line pricing and forecasts, as well as profit and loss monitoring by product, and OEM purchase and sale of products in the Research Products line. In conjunction with product management duties, the Product Manager will be responsible for direct sales and technical support of the Promega line at trade shows, key accounts, and while at the headquarters.

Requirements include an M.S. degree or equivalent in a molecular biology related field with a minimum of 3 years of industrial experience in a product management role. Extensive travel is required.

Promega offers a competitive salary, comprehensive benefits, and a challenging, high-growth environment in which to apply your professional skills. All information will be kept in strict confidence. To apply, forward a résumé and references to:

**Promega Corporation
Human Resources/PM
2800 South Fish Hatchery Road
Madison, WI 53711-5305**

Promega Corporation is an Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION—PHYSIOLOGICAL NMR. A position is available immediately in the Biomedical NMR Center of the University of Arkansas for Medical Sciences (UAMS). The ideal candidate should have a Ph.D. in a basic science and previous experience in physiological applications of NMR. The laboratory has a GE CSI-4.7T/33cm system, a GN-300WB high resolution NMR, and liberal access to a Signa MRI system with spectroscopy. The laboratory has basic and clinical projects in MR spectroscopy and imaging of ^{31}P , ^1H , ^{19}F , and ^7Li both in vivo and in vitro. Period is 1 year, renewable by mutual agreement. Salary is \$23,000. Individuals should send résumé and names of three references to: **Richard A. Komoroski Ph.D., Director, NMR Laboratory, Slot 582, UAMS, 4301 West Markham, Little Rock, AR 72205.**

POSTDOCTORAL/RESEARCH ASSOCIATE position available to study RNA Processing in animal cells and viruses. Background either in biochemistry, microbiology or molecular biology needed. Experience in recombinant DNA technology desirable. Salary negotiable. Send résumé with two names for references to: **Dr. Mary Edmonds, Department of Biological Sciences, University of Pittsburgh, Pittsburgh, PA 15260.** Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH POSITION available to work on the molecular cell biology of phagocyte oxidant and anti-oxidant systems. A Ph.D. or equivalent in molecular biology or a related field is preferred. Contact: **Dr. Peter E. Newburger, Departments of Pediatrics and Molecular Genetics—Microbiology, University of Massachusetts Medical School, Worcester, MA 01655.** Telephone: 508-858-4225. The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer.

DANA-FARBER CANCER INSTITUTE AND HARVARD SCHOOL OF PUBLIC HEALTH PROFESSOR OF EPIDEMIOLOGY

The above institutions are seeking a Professor of Epidemiology. The successful applicant will have an administrative appointment as Director of the Division of Cancer Epidemiology and Control at the Dana-Farber Cancer Institute and an academic appointment in the Department of Epidemiology at the Harvard School of Public Health. Applicants should have an M.D. degree plus training and extensive experience in cancer epidemiology or a closely related field. Clinical training in oncology and/or experience in community outreach activities are desirable.

Responsibilities of the Division Director include conduct of a research program relating to the causes and prevention of cancer as well as application of the results of this research to the community. Responsibilities at the Harvard School of Public Health include teaching and supervision of graduate students.

Qualified minority and female applicants are encouraged to apply. Harvard University and the Dana-Farber Cancer Institute are Affirmative Action/Equal Opportunity Employers.

Applicants should send a complete curriculum vitae and the names of at least five references to:

**Ann R. Oliver
Associate Dean
Harvard School of Public Health
677 Huntington Avenue
Boston, MA 02115**

RESEARCH ASSISTANT—BIOCHEMISTRY. Studies are aimed at understanding protein and nucleic acid structure, function, and interactions, using genetic and biochemical methods. Duties include bacterial strain maintenance; routine genetic and molecular genetic manipulations; gel electrophoresis; column chromatography; other standard preparative and analytical methods. Research experience required; independent work possible. Send curriculum vitae with names and telephone numbers of two persons who can be contacted for recommendations to: **Ms. Marilyn Ham, Chemistry Department, Princeton University, Princeton, NJ 08544.** Equal Opportunity/Affirmative Action Employer.

**HEAD RADIOCHEMIST
MINNEAPOLIS VA MEDICAL CENTER
UNIVERSITY OF MINNESOTA
HOSPITAL AND CLINIC**

The new Veterans Administration/University of Minnesota PET Program is seeking an experienced, research-oriented radiochemist with demonstrated expertise in synthetic organic chemistry to head up a four-man cyclotron/radiochemistry group. The successful applicant will join an established PET group working in a state-of-the-art facility in close proximity to the University of Minnesota. This position is ideally suited for an ambitious, career-oriented individual who wishes to maintain a university affiliation/appointment. Salary and academic rank commensurate with qualifications. Competitive benefits.

Send curriculum vitae and bibliography in confidence to D.A. Rottenberg, M.D., Medical Director, VAMC/UMHC PET Program,

**c/o Robert A. Petzel, M.D.
Chief of Staff
Veterans Administration Medical Center
One Veterans Drive
Minneapolis, MN 55417**

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**R&D Senior Scientist
Bioanalytical Chemistry**

The Bausch & Lomb Personal Products Division is seeking a creative individual to help maintain its position as the technological leader in the OTC eye care and lens care market. Our current opening is ideal for a highly motivated scientist interested in joining our multi-disciplinary research and development team at our multi-million dollar R&D facility in Rochester, New York.

The ideal candidate will possess a PhD in Bioanalytical Chemistry (or equivalent) with 0-2 years industrial experience. The position requires a strong background in Biochemistry and separation technology (HPLC, GC, gel electrophoresis). Responsibilities will include the development and application of assay methods for product support and R&D programs. Strong communication and supervisory skills are necessary.

We offer significant potential for professional career growth, along with a competitive salary, benefits and relocation package. For confidential consideration, please send your resume with salary history, in confidence, to: Ms. Marilyn Catlin, Sr. Human Resource Representative, Bausch & Lomb, Personal Products Division, 1400 N. Goodman St., Rochester, NY 14692.

BAUSCH & LOMB

An Equal Opportunity Employer

**Inflammation
Research**

The Department of Cellular and Molecular Pharmacology of Merck Sharp & Dohme Research Laboratories is engaged in multi-disciplinary studies aimed at developing novel therapeutic agents for the treatment of inflammatory diseases. To participate in this effort, we seek a creative and enthusiastic individual with a broad base expertise in the measurement and evaluation of cardiovascular and/or pulmonary function in laboratory animals (dogs, sheep, swine, non-human primates). Qualified candidates will possess a MS or BS (or equivalent) in Physiology, Pharmacology or related discipline.

Merck Sharp & Dohme Research Laboratories are located in Rahway, New Jersey approximately 25 miles from New York City. In addition to first-rate salary and comprehensive benefits package we offer the opportunity for exceptional scientists to pursue stimulating careers with excellent growth potential. Interested candidates should submit their curriculum vitae with the names of three references and salary requirements to: **Ms. Lonnie L. Deetz, R80M-TL1, Merck & Co., P.O. Box 2000, Rahway, NJ 07065.**

AN EQUAL OPPORTUNITY EMPLOYER



Merck & Co., Inc.

POSITIONS OPEN

REPRODUCTION/TERATOLOGY MANAGER—Microbiological Associates has an immediate opportunity in our Bethesda, Maryland, facility. The position will require the continuing development of our "in-house" capabilities and the direction and supervision of the entire program. We seek a Ph.D. with at least 5 years of "hands on" experience conducting general animal teratology and reproduction studies primarily for submission to government agencies.

Join us as we continue to build on our 40-year commitment to high quality science. For immediate consideration, send your résumé to:

Microbiological Associates Inc.
9900 Blackwell Road
Rockville, MD 20850

Equal Opportunity Employer M/F/H/V.

Oregon Health Sciences University, Division of Neurosurgery is recruiting a **RESEARCH SCIENTIST** to assist with the development of a neurophysiology laboratory. Candidates must have experience in electrophysiology and somatosensory systems including primary afferent fibers and dorsal horn neurons. Appointment will be at the level of assistant professor of surgery with a joint appointment in an appropriate basic science department. Send applications to: **Kim J. Burchiel, M.D., Professor and Head, Division of Neurosurgery, Oregon Health Sciences University, 3181 SW Sam Jackson Park Road, Portland, OR 97201.**

Women and minorities are encouraged to apply. OHSU is an Equal Opportunity/Affirmative Action Employer.

SCIENCE ENDOWED CHAIR

Incarate Word College (IWC) invites nominations and applications for the newly endowed chair in science. Earned doctorate, proven record of excellence in teaching in biology or a related field and research experience required. Review of applications begins 15 March 1989. Send applications and all supporting materials to: **Search Committee, Chair in Science, Incarnate Word College, 4301 Broadway, San Antonio, TX 78209.** Applications from women and minorities are encouraged. IWC is an Equal Opportunity/Affirmative Action Employer.

SENIOR CHEMIST

Responsibilities include supervising the research and development of new inks and related materials in connection with the company's ink projects; characterizing and defining suitable inks for print testing; checking compatibilities and setting up analytical quality control methods. Responsible for the work of three chemists. An applicant must have a Master of Science degree with a concentration in either inorganic or physical chemistry and either 2 years of experience as a senior chemist or 5 years of experience in physical or inorganic chemistry. Also required is a strong background and experience in organic chemistry, including dye and solvent chemistry; a strong background and experience in analytical chemistry, including HPLC, GC, FTIR, UV-VIS, AA, fluorescent, colorimetry, and DSC; and a strong background and experience in surface chemistry and solution chemistry. Salary range: \$47,000 to \$53,000 per year. Send résumé to: **Job Service Technical Unit, Connecticut Department of Labor, 200 Folly Brook Boulevard, Wethersfield, CT 06109.** Refer to job order #3042844. An Equal Opportunity Employer.

SUPERVISORY RESEARCH CHEMISTS. FAA Civil Aeromedical Institute, Oklahoma City, Oklahoma. Two positions in Career Civil Service. One position will supervise the Combustion Toxicology Research Program; the other position will be responsible for developing the team and new program in Forensic Toxicology Research. Contact: **Shirley Cox, 405-686-4506,** for qualification requirements and application forms. *Equal Opportunity Employer.*

POSITIONS OPEN

DIRECTORATE FOR SCIENCE AND ENGINEERING EDUCATION (SEE) NATIONAL SCIENCE FOUNDATION (NSF)

SENIOR-LEVEL POSITION OPPORTUNITIES at Division Director, Office Head, Deputy Division Director, Section Head and Program Director levels are anticipated on both an immediate and future basis. NSF is seeking applications from people with outstanding credentials in science and engineering education and significant administrative experience.

SEE includes the following major program activities: Teacher Preparation and Enhancement; Materials Development, Research and Informal Science Education; Undergraduate Science, Mathematics and Engineering Education; Research Career Development; and Studies and Program Assessment. Appointment options include permanent or temporary federal employment or assignment under the Intergovernmental Personnel Act (IPA). Federal salaries range from approximately \$50,000 to \$75,000 depending on position level and salary history. IPA assignees will retain university salary and benefits.

Those interested are encouraged to submit a résumé and letter indicating areas of interest, salary requirements, and availability dates. For appointments starting in the 1989 to 1990 academic year, applications should be submitted by 1 May 1989 to: **Margaret Cademartori, National Science Foundation, Division of Personnel and Management, Room 208, 1800 G Street, NW, Washington, DC 20550.** Ms. Cademartori may be reached on 202-357-7601 (hearing-impaired individuals may call: TDD 202-357-7492) for questions or to obtain additional information about the SEE Directorate.

Equal Opportunity Employer

University of California, Los Angeles (UCLA) Urology Division seeks Board-certified **UROLOGIST** with expertise in renal transplantation for faculty position. Requirements: proven ability to organize clinical training; ability to collaborate in immunology research; experience in reconstructive and pediatric urology; excellent surgical skills. Applicants should contact: **The UCLA Division of Urology, Los Angeles, CA 90024-1738.** *UCLA is an Equal Opportunity/Affirmative Action Employer.*

VISITING ASSISTANT PROFESSOR DEPARTMENT OF BIOLOGICAL SCIENCES THE UNIVERSITY OF TEXAS AT EL PASO

We are seeking applicants for a nontenure-track position. Will be responsible for teaching general biology and general microbiology in the fall and spring semesters of 1989 to 1990. Will be expected to interact on a research level with faculty whose expertise lie in immunology, parasitology or biochemistry. A Ph.D. is required and postdoctoral research experience is preferred. Salary: \$26,000. Deadline for applications is 15 June 1989. Send curriculum vitae and a list of three references to: **Dr. Eppie D. Rael, The University of Texas at El Paso, Department of Biological Sciences, El Paso, TX 79968-0519.** *The University is an Equal Employment Opportunity/Affirmative Action Employer.*

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIPS IN CLINICAL RESEARCH

At Harvard Medical School Department of Psychiatry, Massachusetts Mental Health Center: postgraduate fellowships in a 2-year program involving independent research under supervision of experienced clinical researchers, participation in integrative seminars, and formal courses at Harvard. Areas include neuropsychopharmacology, neuropsychology, psychopharmacology, neurophysiology, schizophrenia research (ERPs/MRI and psychoneuroendocrinology), social cognition, and social psychiatry. Open to psychiatrists, residents in psychiatry, other physicians, and Ph.D.'s in biological or social sciences. Stipends from \$17,000 to \$31,500. Application deadline: 1 November 1989, with possibility of appointment as early as 1 July 1989. *Minority applications encouraged.* Send inquiries, curriculum vitae, statement of research interest and research training desired to: **Program Administrator, Clinical Research Training Program, Massachusetts Mental Health Center, 74 Fenwood Road, Boston, MA 02115.**

FELLOWSHIPS

LUPUS RESEARCH SCHOLAR AWARD PROGRAM

Terri Gotthelf Lupus Research Institute invites applications and nominations for scholarships available 1 July 1990. 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 1989. Information and specific application requirements are available upon written request only from:

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

CONFERENCES

HANS SELYE SYMPOSIA ON NEUROENDOCRINOLOGY AND STRESS: NEUROENDOCRINOLOGY OF GASTROINTESTINAL ULCERATION 13 to 15 September 1989

Estérel (Near Montreal), Quebec, Canada

The "Hans Selye Symposia on Neuroendocrinology and Stress" are held every 2 to 3 years and are devoted to specific topics in fields related to neuroendocrinology and stress. The next meeting will be devoted to the neuroendocrine aspects of gastrointestinal (GI) ulceration. The format of the meeting will be that of minisymposia where following two to three invited lecturers, brief presentations will be scheduled selected from submitted abstracts. The topics to be covered are the neuroendocrine control of gastroduodenal secretion, GI motility, GI microcirculation, gastric and duodenal ulceration, ulcerative colitis, as well as central vs. peripheral neuroendocrine factors in ulcer disease, growth factors and immunology as related to neuroendocrinologic aspects of GI ulceration. Deadline for submission of abstracts is 1 May 1989 and for registration to participate without abstract presentation is 15 August 1989. The abstracts will be published in *Digestive Diseases and Sciences*. Registration material and abstract forms can be obtained from: **Joyce M. Fried, Brain Research Institute, University of California, Center for the Health Sciences, Los Angeles, CA 90024-1761.** Telephone: 213-825-5061; FAX: 213-206-5855.

The Standing Committee of the Hans Selye Foundation: **Mark Cantin (Montreal), Louise Drevet-Selye (Montreal), Sandor Szabo,** coordinating chairperson for this meeting (Boston) and **Yvette Taché (Los Angeles).**

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THE INSTITUTE OF CANCER RESEARCH

CHIEF EXECUTIVE

The Committee of Management of The Institute of Cancer Research has decided to appoint a new senior management team. Led by the Chief Executive, the team will include two new posts for Directors of Research. Applications are now invited for the post of Chief Executive in succession to the present Director, Professor Weiss.

The Chief Executive will be accountable to the Committee of Management and will carry overall responsibility for all management and research. In addition, he or she will play a key role in the selection, appointment and integration of the new senior management team.

The position provides an outstanding opportunity to lead the Institute, with the collaboration of the internationally recognised Royal Marsden Hospital and a national charity, the Cancer Research Campaign, into further advances in cancer research. Suitable applicants must be qualified in, and have substantial management experience of, clinical and/or scientific research.

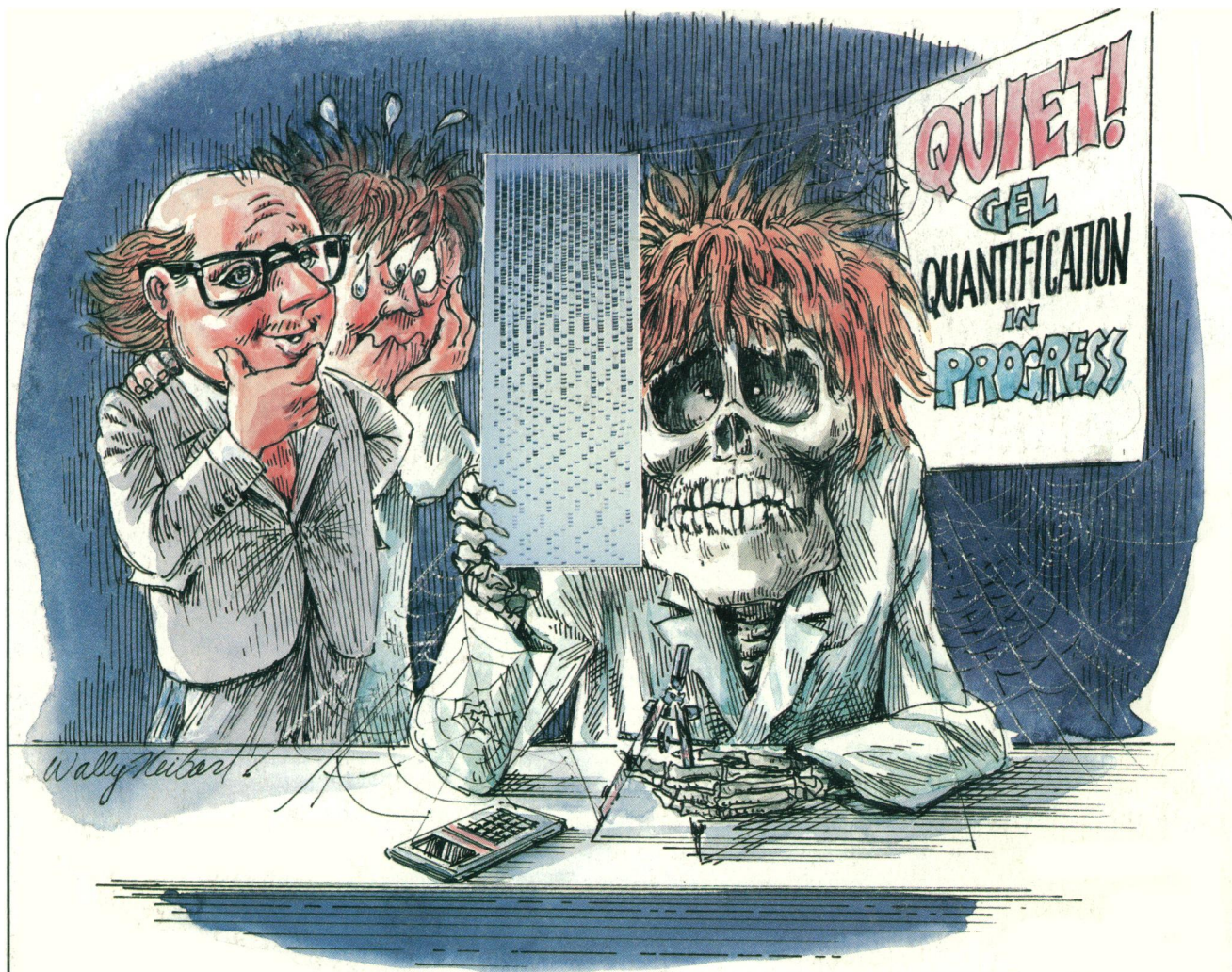
The responsibilities encompassing all aspects of the management of a major scientific institution will be recognised in the salary and conditions of service.

The Committee of Management reserves the right to appoint to the post by invitation.

Applications, enclosing a cv, and enquiries should be sent, in confidence, to Sir Kenneth Stowe GCB, CVO, Chairman of the Institute, 17a Onslow Gardens, London SW7 3AL. Fax: 01-225 2574. Further information may be obtained from the Institute's Acting Secretary at the above address.

The Institute, together with The Royal Marsden Hospital, constitutes the largest comprehensive cancer centre in the UK. The Institute, a charity which employs some 500 people and has an annual budget of £15m, is a constituent of the British Postgraduate Medical Federation of the University of London. Its main source of funding is the Cancer Research Campaign, a national charity with which the Institute's work is closely linked. The Royal Marsden Hospital is a Special Health Authority with 380 beds and a heavy and varied caseload.

The Institute's extensive programme of multidisciplinary research, conducted in the context of the Hospital's clinical practice and the Campaign's nationally co-ordinated research effort, is enacted in laboratories alongside and within The Royal Marsden Hospital on two sites. Having recently completed the refurbishment of the Institute's Chester Beatty Laboratories, Chelsea, we are presently considering a major building and development programme for our laboratories at Sutton.



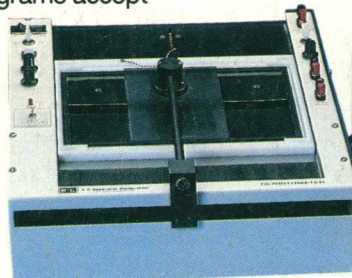
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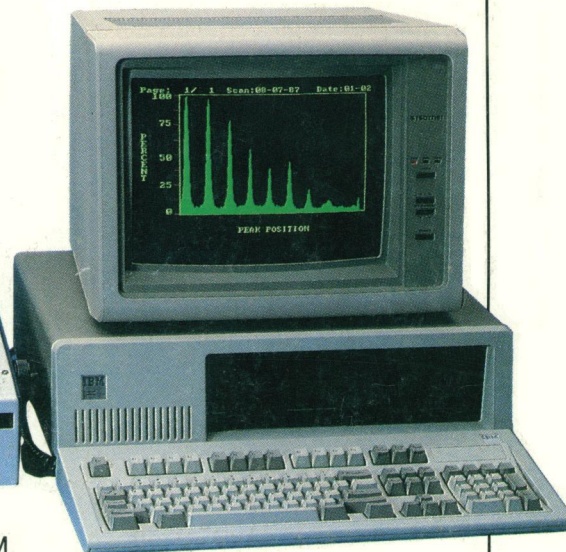
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