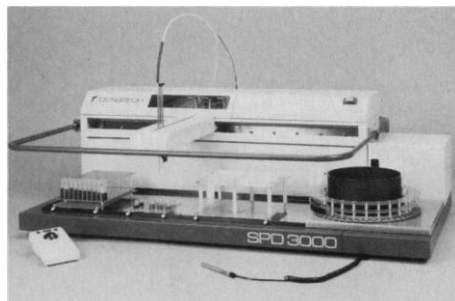


Products & Materials

Automated Liquid Handling

The SPD 3000 Total Liquid Handling System is a computer-controlled sample preparation system. A tracker ball sets up the instrument and allows fast definition of working areas. The probe control can be programmed to operate at different speeds during different steps so that, for example,



the probe moves quickly between samples but slowly when entering and exiting test chambers. A liquid-level sensor system determines reagent or sample volume. The SPD 3000 may be equipped with either one or two probes. Other options include a tube washer, a plate washer, a 96-position carousel and bar-code reader, a magnetic stirrer, and several rack configurations. Dynatech Laboratories. Circle 599.

Scientific Mapping Program

SURFER is a menu-driven software package for graphically illustrating irregularly spaced x, y, z data. It creates contour maps and three-dimensional surface plots from coordinates or a user-specified function of two variables. Data may be entered from the keyboard or from external data files. Maps may be created with labeled axes, in-line contour labels, linear or logarithmic contour intervals, data posting, feature plotting on the surface, hidden line removal, stacked contour or fishnet plots, and irregularly shaped boundaries. The user may customize maps with the graphic editor. Three-dimen-

sional surface plots may be rotated and tilted to any angle with either a perspective or orthogonal projection. SURFER operates on IBM PC, XT, AT, PS/2, and compatible computers with 256 kilobytes of memory. Golden Software. Circle 602.

Calmodulin Probe

Biocam is a biotinylated calmodulin with a biological activity of approximately 90%. It can localize, identify, and quantify calmodulin-binding proteins after sodium dodecyl sulfate-polyacrylamide gel electrophoresis and Western blotting. Biocam binds to hydrophobic chromatography matrices in the presence of calcium and can detect immobilized calmodulin-binding proteins in quantities as low as 1 ng. Detection with Biocam takes 1 day and involves less radiation than methods using ^{125}I -labeled calmodulin. Biomedical Technologies. Circle 601.

Graphing Software

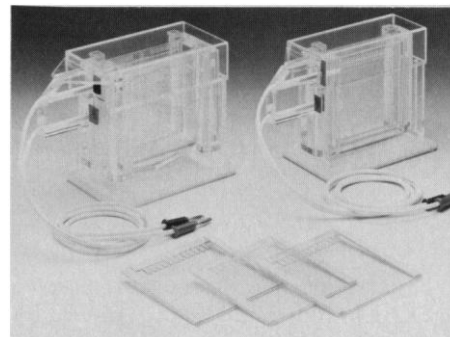
Temple Datatap Graph is an interactive, WYSIWYG (what you see is what you get) computer program that plots graphs on either a plotter or a high-resolution graphics printer. Graph types include Cartesian, polar, bar (both horizontal and vertical), pie, and text charts. The user controls with the arrow keys the size, location, and color of graph parameters such as the frame, legend, axes, tick marks, grids, and labels. Editing and rescaling are accomplished with the arrow and function keys. Two or three frames may be stacked with automatic alignment of axes. Temple Datatap Graph requires an IBM XT or AT with 512 kilobytes of random-access memory, a graphics adapter, and a plotter or graphics printer. Milhalisin Associates. Circle 605.

Cell Concentration Measurement On-Line

The FluroMeasure Detector estimates cell concentration during fermentation and cell cultivation by measuring the fluorescence of the reduced form of nicotinamide adenine dinucleotide (NADH). The system comprises, in addition to an NADH detector, cell mass applications and fermentation monitoring and analysis software and an IBM PC, XT, or AT. The FluroMeasure Detector is steam sterilizable or available with an optic well for autoclavable vessels. The system can display in real time process variables such as cell mass against time. BioChemTechnology. Circle 604.

Precast Electrophoresis Mini-Gels

DPC Mini-Gels are 1-mm-thick precast gels in glass cassettes of 10 by 10 or 8 by 10 cm. The gels are available in gradients for several proteins, and both sodium dodecyl sulfate and nondenaturing buffer systems are



available. Each gel has twelve sample wells cast into the surface for loading of samples as large as 12 μl . The gels are silver stain- and Western blot-compatible. Integrated Separation Systems. Circle 606.

Literature

Percoll and Density Marker Beads is a data sheet about a density-gradient medium for separation of cells, subcellular particles, and viruses. Pharmacia, Laboratory Separation Division. Circle 594.

Biotechs is a newsletter about biochemicals for research in the life sciences. E-Y Laboratories. Circle 608.

Evaluation and Purification of Synthetic Oligonucleotides is a 56-page booklet that discusses standard synthesis methods and the purification problems that derive from each chemistry. Applied Biosystems. Circle 609.

Fluorolog-2 Spectrofluorometer Systems is a brochure describing a line of spectrofluorometers and the analytical applications of spectrofluorometry. SPEX Industries. Circle 610.

Antimicrobial Agents is a wall chart that lists the trade names, manufacturers, and derivations of antimicrobial agents available as susceptibility test disks. BBL Microbiology Systems. Circle 611.

Bio-Radiations 63 is a newsletter featuring descriptions of affinity high-performance liquid chromatography supports, a modular slot-format microfiltration apparatus, and an immunoblotting kit for detecting human antibodies. Bio-Rad Laboratories. Circle 612.

Na I (TI) Scintillation Detectors explains the use of scintillation crystals to measure the spectrum and intensity of radiation. Teledyne Isotopes. Circle 613.

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.

Books Received

Commutative Ring Theory. Hideyuki Matsumura. Cambridge University Press, New York, 1986. xiv, 320 pp. \$49.50. Cambridge Studies in Advanced Mathematics, 8. Translated from the Japanese edition (Tokyo, 1980) by M. Reid.

Compression Wood in Gymnosperms. T. E. Timell. Three volumes. Springer-Verlag, New York, 1986. xxi, 2150 pp., illus. \$398, boxed.

Computer Chips and Paper Clips. Technology and Women's Employment. Vol. 2, Case Studies and Policy Perspectives. Heidi I. Hartmann, Ed. National Academy Press, Washington, DC, 1987. xvi, 438 pp. Paper, \$34.95.

Concepts and Trends in Particle Physics. H. Latal and H. Mitter, Eds. Springer-Verlag, New York, 1987. x, 325 pp., illus. \$48. From a school, Schladming, Austria, Feb. 1986.

Concepts of Modern Physics. Arthur Beiser. 4th ed. McGraw-Hill, New York, 1987. viii, 616 pp., illus. \$42.95.

Connaissance et le Dire. Gilberte Piérat-Le Bonniec, Ed. Bardaga, Brussels, Belgium, 1987. 277 pp. Paper, 1450 BF. Psychologie et Sciences Humaines, 163.

From Sand to Circuits and Other Inquiries. John J. Simon, Jr., Ed. Harvard University Office for Information Technology, Cambridge, MA, 1987. xii, 271 pp., illus. \$24.95.

Fundamentals of Comparative Vertebrate Endocrinology. I. Chester-Jones, P. M. Ingleton, and J. G. Phillips, Eds. Plenum, New York, 1987. xvi, 666 pp., illus. \$75.

Gene Regulation by Steroid Hormones III. A. K. Roy and J. H. Clark, Eds. Springer-Verlag, New York, 1987. xii, 302 pp., illus. \$93. From a conference, Rochester, MI, Sept. 1985.

General Chemistry in the Laboratory. Julian L. Roberts, Jr., J. Leland Hollenberg, and James M. Postma. 2nd ed. Freeman, New York, 1987. xii, 478 pp., illus. Paper, \$19.95.

Genes. Benjamin Lewin. 3rd ed. Wiley, New York, 1987. xxii, 761 pp., illus. \$38.95.

Genetic Aspects of Developmental Pathology. Enid F. Gilbert and John M. Opitz, Eds. Liss, New York, 1987. xxii, 482 pp., illus. \$125. March of Dimes Birth Defects Foundation, Birth Defects: Original Article Series, vol. 23, no. 1. From a symposium, Madison, WI, Sept. 1985.

Geomorphology from Space. A Global Overview of Regional Landforms. Nicholas M. Short and Robert W. Blair, Jr., Eds. National Aeronautics and Space Administration, Washington, DC, 1986 (available from Government Printing Office, Washington, DC). xx, 717 pp., illus. \$41. NASA Special Publication.

The Geophysics of Amazonia. Vegetation and Climate Interactions. Robert E. Dickinson, Ed. Wiley-Interscience, New York, 1987. xviii, 526 pp., illus. \$72.50. Wiley Series in Climate and the Biosphere. From a conference, São José dos Campos, Brazil, Feb.-Mar., 1985.

Goethe and the Sciences. A Reappraisal. Frederick Amrine, Francis J. Zucker, and Harvey Wheeler, Eds. Reidel, Dordrecht, 1987 (U.S. distributor, Kluwer, Norwell, MA). xviii, 442 pp., illus. \$79. Boston Studies in the Philosophy of Science, vol. 97.

Grant and Hackh's Chemical Dictionary. Roger Grant and Claire Grant, Eds. 5th ed. McGraw-Hill, New York, 1987. xiv, 642 pp. \$74.

Immunostimulants. Now and Tomorrow. Ichiro Azuma and Georges Jollès, Eds. Japan Scientific Societies Press, Tokyo, and Springer-Verlag, New York, 1987. xvi, 258 pp., illus. \$59.30. Based on a symposium, Kashikojima, Japan, June 1985.

The Impact of Illness on World Leaders. Bert Edward Park. University of Pennsylvania Press, Philadelphia, 1986. xxiv, 377 pp., illus. \$24.95.

In The Throes of Criminal Justice. A History of the Origin, Development, and Failure of Our System of Criminal Justice. Howard André McDonnell, Sr. Dorrance, Bryn Mawr, PA, 1987. xxii, 393 pp., illus. \$16.95.

Inactivity. Physiological Effects. Harold Sandler and Joan Vernikos, Eds. Academic Press, Orlando, FL, 1986. xvi, 205 pp., illus. \$39.

Inductively Coupled Plasma Emission Spectroscopy. Part 1, Methodology, Instrumentation, and Performance. P. W. J. M. Boumans, Ed. Wiley-Interscience, New York, 1987. xiv, 584 pp., illus. \$75. Chemical Analysis. A Series of Monographs on Analytical Chemistry and Its Applications, vol. 90.

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.

LINE CLASSIFIED ADVERTISING DEADLINES:
Thursday, 10 a.m., 2 weeks prior to issue date (mailed on issue date).

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): \$35.00 per line; \$350 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 \$35.00 = 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

Biology, B.A. Ten years of laboratory experience. Measurement of leukotrienes and prostaglandins. Some small animal surgery and ex vivo perfusion of hearts. Immunization and serum collection from small mammals. Peripheral blood leukocytes preparation. Quantitative/qualitative determinations by RIA, HPLC, TLC and UV/visible spectrophotometry. Radioisotope use. Some tissue culture. Some computer programming and statistical analysis. Prefer Pacific Northwest location. Box 119, SCIENCE.

Biophysical Chemist with Organic Chemistry Ph.D. Many years of academic research experience plus publications in biochemistry, pharmacology, and chemistry. Areas include synthesis of anti-tumor agents; functional reconstitution of transport proteins; anesthetic/membrane interactions; preparation and uses of liposomes for membrane studies. Strong background in spectroscopic techniques. Teaching experience in chemistry and biochemistry. Seeks challenging position in research/administration (Northeast preferred). Box 120, SCIENCE.

POSITIONS WANTED

Entomologist with 40 publications in genetics, resistance and ecology seeking academic, industrial, or government position. Paul McDonald, Box 75, Middlebury, CT 06762. Telephone: 203-758-2076.

Flow Cytometry expert experienced in cell sorting, tumor immunology, cell activation, membrane potential, cell cycle, and receptor binding; available full-time or consulting; U.S. or worldwide. Box 7850, Stanford, CA 94305. Telephone: 415-366-4336.

In Vitro Toxicologist/Cell Biologist, Ph.D. 1974. Experienced in in vitro assay development and many biochemical and cell culture techniques. Over 30 publications. Seeks industrial or academic position in Northeast. Box 111, SCIENCE.

M.D., Ph.D., available for part-time medical consultations. Clinical or investigational projects are considered. P.O. Box 6447, Stanford, CA 94305-0136.

Microbiologist, M.S. Experience in bacteriology, extensive tissue culture, protein purification and analysis, excellent computer skills, wide variety of analytical techniques. Prefer northern New Jersey. Box 115, SCIENCE.

Ph.D. Pathogenic Microbiologist; publications, recent research and teaching experience, international science and technology policy and negotiating experience, seeks academic or industrial position in science and technology policy/management. Box 117, SCIENCE.

Science/Administration: have Ph.D., postdoctorate, senior postdoctorate, associateships, fellowships, worked with NAS, NASA, NATO, industry and government grants, graduate teaching in U.S., Asia, and Europe. Box 116, SCIENCE.

POSITIONS OPEN

The Delaware Museum of Natural History invites applications for an **ASSISTANT CURATOR IN MALACOLOGY**. Responsibilities include departmental administration, collection of collection-oriented research on molluscan systematics, and participation in collection management, and the museum's public programs. Applicants must have a doctorate or equivalent experience. Curatorial experience desired. Position available immediately. Send résumé, names of three references, and reprints by 30 September 1987 to: **Dr. Barbara H. Butler, Director, Delaware Museum of Natural History, P.O. Box 3937, Wilmington, DE 19807.**

ASSISTANT PROFESSOR

Tenure-track position available for membrane cell biologist. Preferred areas of research: membrane-cytoskeleton interactions, image reconstruction analysis, in vitro reconstitution of vesicular transport, and molecular biology of membrane components. Salary commensurate with training and experience. Candidates are expected to participate in one team taught course in the Medical College and in the training of graduate students in cell biology or genetics. To apply, send curriculum vitae and brief summary of research interests to: **Dr. Donald Fischman, Chairman, Department of Cell Biology and Anatomy, Cornell University Medical College, 1300 York Avenue, New York, NY 10021.** Applications should be received by 15 September 1987. *Equal Employment Opportunity/Affirmative Action/M/F/H/V.*

ASSISTANT PROFESSOR ENVIRONMENTAL SCIENCE

The Department of Biological and Environmental Sciences, McNeese State University, invites applications for a tenure-track position in environmental science to begin January 1988. Applicants must have Ph.D. and should have expertise in solid waste/hazardous waste management. A strong commitment to research and teaching at both graduate and undergraduate levels is essential. Send résumé and summary of research plans to: **Dr. Robert Maples, Chairman, Environmental Science Search Committee, Department of Biological and Environmental Sciences, McNeese State University, Lake Charles, LA 70609.** *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

ASSISTANT DIRECTOR CLINICAL CHEMISTRY

The Department of Laboratory Medicine at Children's Hospital National Medical Center, a 279-bed tertiary referral center which serves as a pediatric teaching hospital for George Washington University School of Medicine, has a position available for an assistant director of clinical chemistry. Responsibilities will include assisting in the day-to-day direction of the clinical chemistry laboratory, teaching pediatrics and pathology residents and research. Successful candidates should have a Ph.D. or M.D. degree, be Board-certified/eligible in clinical chemistry (ABCC) or clinical pathology. Will hold tenure-track appointment in Department of Child Health and Development and Pathology at the George Washington University School of Medicine. Send curriculum vitae with three letters of recommendation to: **Dominga McFadden, Senior Personnel Recruiter, Children's Hospital National Medical Center, 111 Michigan Avenue, NW, Washington, DC 20010. Equal Opportunity Employer.**

ASSISTANT PROFESSOR FISHERIES ECOLOGY

The Department of General Science at Oregon State University invites applications for a full-time (fixed-term) appointment at the assistant professor (senior research) level beginning as soon as October 1987. Applicants must have at least 2 years of postdoctoral experience, be prepared to carry out independent research, and should have knowledge of the physics and photobiology involved with the potential depletion of stratospheric ozone and the concomitant increase in atmospheric transmission of UV-B radiation. Preference will be given to applicants with experience in the integration of stress responses of both the primary producer and primary consumer components of the marine food web with a commercial fisheries model. Closing date is 31 August 1987 or until filled. Send letter of application, curriculum vitae, graduate transcripts, and names, addresses, and telephone numbers of four references to: **Dr. Paul Farber, Department of General Science, Oregon State University, Corvallis, OR 97331. Oregon State University as an Affirmative Action/Equal Opportunity Employer.**

ASSISTANT PROFESSOR EUKARYOTIC MOLECULAR GENETICS

Applications are invited for a tenure-track faculty position, available 1 July 1988, from individuals with demonstrated research excellence in an area of plant or fungal gene structure and function. The program will complement existing research programs in molecular biology of host-pathogen interactions and host plant genetics. Teaching responsibilities (10%) will include a graduate level course in the area of expertise. A Ph.D. is required; postdoctoral experience is preferred.

Please send curriculum vitae and a statement of research interests, and have three letters of recommendation sent by 1 October 1987, to:

**Dr. Jan E. Leach, Search Committee Chairman
Department of Plant Pathology
Throckmorton Hall
Kansas State University
Manhattan, KS 66506
Telephone: 913-532-6176**

An Affirmative Action/Equal Opportunity Employer.

ASSISTANT, ASSOCIATE, OR FULL PROFESSOR—PARASITOLOGY—Department of Veterinary Microbiology and Immunology is seeking person with a Ph.D. degree or equivalent with advanced training in veterinary and medical parasitology. Preference will be given to applicants with the D.V.M. degree. The candidate must have a demonstrated ability and experience in teaching and service applicable to responsibilities of the position. Apply in writing and include curriculum vitae, list of publications, and names of three references. Send to: **Dr. Norman F. Baker, Chairperson Search Committee, Department of Veterinary Microbiology and Immunology, University of California, Davis, CA 95616.** Applications accepted through 31 October 1987 or until a suitable candidate is identified.

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

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR INDUSTRIAL HYGIENE

Applications are invited for an Industrial Hygiene faculty position at the University of California, Los Angeles (UCLA) School of Public Health. A tenure ladder appointment at the assistant or associate professor level is expected although candidates at higher levels will be considered. The Industrial Hygiene Program at UCLA is a component of the University of California Southern Occupational Health Center and the Southern California NIOSH Educational Resource Center. A doctoral degree in industrial hygiene or a related field is required. Individuals demonstrating high academic achievement and the potential for research in industrial hygiene and related fields are encouraged to apply. Preference will be given to candidates with research interests in exposure characterization, dose modeling, control technology, and industrial hygiene chemistry. Send curriculum vitae and names of three references to: **William C. Hinds, Sc.D., CIH, UCLA School of Public Health, Los Angeles, CA 90024-1772. UCLA is an Equal Opportunity/Affirmative Action Employer and encourages qualified minority and women applicants.**

ASSOCIATE SPECIALIST POSITION IN THE DEPARTMENT OF PHARMACY UNIVERSITY OF CALIFORNIA SAN FRANCISCO

Mature, experienced bioanalytical scientist sought as research and development group leader for the Drug Studies Unit, Analytical Division, a clinical research facility within the School of Pharmacy. Successful candidate will be responsible for development of new and modified analytical methods with complete validation procedures for multiple contract research programs in drug bioavailability and pharmacokinetics. Responsibilities include training and supervision of over 30 laboratory personnel to assure compliance with GLP. Applicants must have M.S. in pharmaceutical science, excellent knowledge of HPLC assay, solid phase separation, and pre- or post-column derivatization of drug compounds, and at least 5 years of experience in laboratory supervision and development of methods for trace analysis of drug metabolites in biological samples. Curriculum vitae and three reference letters should be sent by 1 September 1987 to: **Emil Lin, Ph.D., Associate Specialist Search Committee, Department of Pharmacy, School of Pharmacy, 5-926, University of California, San Francisco, CA 94143-0446. UCSF is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply.**

BACTERIAL MOLECULAR GENETICIST

Tenure-track faculty position at assistant professor level in the Department of Microbiology and Immunology, University of Kentucky College of Medicine. Candidates should possess a strong background in genetics and research experience, and interests in some aspect of the organization or expression of bacterial genes. The successful candidate will be expected to develop a strong independent research program and to participate in the microbiology graduate program. Excellent support for research start-up, technical assistance, and equipment will be provided. Appointment is on a 12-month basis, with modest teaching responsibilities, salary commensurate with experience, and a negotiable starting date. Applicants should send a current curriculum vitae, a summary of research plans, and at least three letters of reference to: **Susan C. Straley, Ph.D., Chairperson—Search Committee, Bacterial Geneticist Position, Department of Microbiology and Immunology, Chandler Medical Center, University of Kentucky, Lexington, KY 40536-0084. The University of Kentucky is an Equal Opportunity/Affirmative Action Employer.**

CHAIRPERSON DEPARTMENT OF NEUROLOGY

New York Medical College is recruiting a Chairperson for its Department of Neurology. The successful candidate must have an established reputation as an investigator and clinician. Experience in an academic setting is essential. Send curriculum vitae and bibliography to:

**Richard D. Levere, M.D.
Chairperson, Neurology Search Committee
Department of Medicine
Munger Pavilion
New York Medical College
Valhalla, NY 10595**

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POSITIONS OPEN

BIOTECH MARKETING STRATEGIST—Knowledge of aspects of product marketing and company positioning in biotech. Background with biotech company, health care company, or marketing consulting necessary. Advanced degree in a biotech science preferred. Management and leadership skills, excellent communication skills.

Regis McKenna Inc., the nation's largest high technology marketing and communications consulting firm, is building its biotech consulting capabilities. Attractive and stimulating Cambridge office. Excellent salary and growth opportunities.

Contact:

**Christopher G. Edwards
General Manager, Biotech Division
Regis McKenna Inc.
One Main Street
Cambridge, MA 02142
Telephone: 617-225-2400**

BIOENGINEERING PROFESSORSHIP

Applications are invited for the position of Cullen Professor of Bioengineering at the University of Houston. This endowed professorship is intended to attract an individual of outstanding reputation in an area within the broad spectrum of bioengineering, including biomedical engineering and biotechnology. Applicants should have a documented record of substantial research achievement, a strong ongoing research program, and an active interest in university teaching. The Cullen Professor will be appointed to one or more of the engineering departments of the Cullen College of Engineering (chemical, civil, electrical, industrial, mechanical) and will provide leadership for all the bioengineering activities in the University. In addition, he/she will provide leadership for bioengineering in the greater Houston community by serving as a liaison to the Texas Medical Center in Houston, to other area bioengineering programs, and to local bioengineering industries. The Cullen Professor will also be expected to further the activities of the newly formed Bioengineering Research Center at the University. Interest in the directorship of the Center will be an important consideration. Applications, including curriculum vitae and names of four references, should be sent to: **Dr. Periklis Y. Ktonas, Chair, Cullen Professor of Bioengineering Search Committee, Department of Electrical Engineering, University of Houston, Houston, TX 77004. Telephone: 713-749-2452. The University of Houston is an Affirmative Action/Equal Opportunity Employer.**

CHEMICAL ENGINEER/POSTDOCTORAL RESEARCH SCIENTIST—Perform experimental and theoretical research on fine particle/liquid separation—a major task in chemical industries. Develop imaging techniques by using gamma camera and C.T. scan (Computerized Tomography) for characterization of flocculation/sedimentation experiments in suspensions of fine particles. Develop computer models with Monte Carlo methods to simulate the transport phenomena of suspended particles in liquid. Use fractal techniques to characterize shape and texture of aggregates of particles. Requirements: Ph.D. in chemical engineering; graduate level coursework must have included transport phenomena, surface and colloid chemistry, and numerical technique. Must have published in the field of gamma camera; C.T. scan and Monte Carlo methods in computer simulation. Thirty-five hours per week; \$20,000 per year. Résumés to: **NYS Job Service, JO #NY8015695, 250 Schermerhorn Street, 3rd Floor, Brooklyn, NY 11201, DOT Code 008 061 018.**

CLINICAL DIRECTOR

Contract laboratory in South Florida is looking for a clinical director for over-the-counter clinical studies. Ph.D. in pharmacology or biochemistry or equivalent in O.T.C. Management, with a background in industry or contract laboratory preferred. Good oral and written communication skills required. Please send résumé and salary history to:

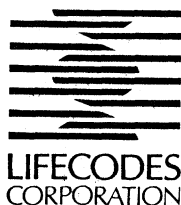
**Hazleton Laboratories
900 Osceola Drive
West Palm Beach, FL 33409
Attn: Personnel**

POSITIONS OPEN

CLINICAL CHEMIST/ ASSISTANT PROFESSOR

Position based at the Veterans Administration Medical Center in Louisville, Kentucky, affiliated with the Department of Pathology, University of Louisville School of Medicine, is available. Candidates must have Ph.D. in chemistry, a strong commitment to service and teaching pathology residents, and also have a documented interest in clinical and/or basic research. The chemistry section performs over one million weighted tests per year. *Women and members of minority groups are strongly encouraged to apply.* Applications accompanied by four letters of recommendation should be addressed to: **Bogdan Nedelkoff, M.D., Department of Pathology, University of Louisville School of Medicine, Louisville, KY 40292.**

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CLINICAL DNA SCIENTIST

Lifecodes Corporation is one of the pioneering companies applying DNA technology to human genetics.

We seek an individual with a recent Ph.D. to join our rapidly growing Forensic and Paternity Reference Laboratory, the premier such organization in the world. This person should have a strong background and interest in the practical applications of recombinant DNA technology and the ability to supervise laboratory personnel.

Lifecodes is located in Westchester, New York, only 30 minutes from midtown Manhattan.

To apply, send curriculum vitae and the names of three references to:

Personnel Department
Lifecodes Corporation
4 Westchester Plaza
Elmsford, NY 10523

CURATORIAL POSITION IN CRUSTACEA

Applications are solicited for a curatorial position in Crustacea at the Natural History Museum of Los Angeles County. Responsibilities include conducting collection-oriented research on the systematics of marine crustaceans, active participation in managing a major collection (including full responsibility for supervising an ongoing NSF collection management grant and the orderly transfer of the Allan Hancock Foundation Crustacea collection), and participation in public programs of the Museum. Doctorate required. Position will be filled at the level of the best-qualified candidate. Starting curatorial salaries: Assistant \$24,759; Associate \$29,196; Full \$36,963. Job will remain open until filled. Applications including names of three references should be sent immediately to: **Dr. Daniel M. Cohen, Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007. Telephone: 213-744-3367. An Equal Opportunity Employer.**

CORNELL UNIVERSITY ELECTROPHYSIOLOGIST

The Section of Neurobiology and Behavior, Cornell University, seeks a full-time (12-month appointment) senior lecturer beginning January 1988 for a 5-year renewable contract. The individual will teach a 20-student undergraduate laboratory/lecture course in neurophysiology and one additional advanced course, such as electronics for neurobiologists. Duties include overall course organization, lecturing, and teaching laboratory sections. A Ph.D. in neurophysiology or related fields, and prior teaching experience, are requirements.

Applicants should send curriculum vitae (including evaluation of teaching), and three letters of reference requested by the candidate to: **Search Committee, Neurobiology and Behavior, W363 Seeley Mudd Hall, Ithaca, NY 14853.** Screening of applicants begins September 1987. *Cornell University is an Affirmative Action/Equal Opportunity Employer.*

SR. DEVELOPMENT SCIENTIST

MS or New Ph.D. To Advance In Plasma Fractionation.

A world leader in the field of plasma fractionation biotechnology recognized for our superior products, this position provides an exceptional opportunity to enhance your scientific expertise through plasma product and process development. A new Ph.D. in Biochemistry or an MS in Biochemistry with related experience may qualify you for this position. A background in plasma fractionation and/or protein fractionation, coagulation fibrinolysis and protein chemistry is helpful, as is research and industrial experience in handling human therapeutic fractions.

Responsibilities involve planning and carrying out experiments in new product development, product improvements and cost reductions at the bench and pilot plant level. This includes working with R&D and Operations personnel in bringing new products to market.

Find out how you can advance your career in a sophisticated scientific technology with a unit of The Rorer Group. Our advanced manufacturing facility is located within easy access to Downtown Chicago and less than 30 minutes from some of Chicago's finest suburbs. In addition to an excellent salary and benefits package, we offer a fast-growth, yet relaxed non-smoking environment. For consideration, send resume with salary history in confidence to: **John S. Davlantes/Manager, Personnel Administration, Dept. SM/8-14.**



Armour Pharmaceutical Co.

P.O. Box 511, Kankakee, IL 60901

Equal Opportunity Employer

Armour hires only United States citizens and lawfully authorized alien workers.

DIAGNOSTIC (MOLECULAR) MICROBIOLOGIST

Opportunity to develop a research-oriented program in Diagnostic Microbiology with intent to expand and improve the use of modern techniques of Molecular Biology in the diagnosis of infectious diseases. The successful applicant will establish and direct a laboratory focusing on viral and/or bacterial agents, and will develop independent and collaborative research projects. He or she will interact with both the basic science Department of Microbiology and with the clinical Infectious Diseases Divisions at this major teaching hospital.

Applicant (M.D. and/or Ph.D.) should have experience using nucleic acid probes and hybridization, Northern and Southern techniques, as well as experience with the use of molecular immunological probes for Diagnostic Microbiology purposes.

The position may be filled at an Assistant or an Associate Professor level. Application including curriculum vitae and names of references should be sent to: **Dr. Peter Palese, Department of Microbiology, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029.** We are an equal opportunity/affirmative action employer.

MOUNT SINAI

POSTDOCTORAL TRAINING PROGRAM IN THE MOLECULAR AND CELLULAR BIOLOGY OF LIPIDS AND LIPOPROTEINS

Applications are invited for advanced research training in the molecular and cellular biology of lipids and lipoproteins. Candidates will participate in basic and clinical research projects with emphasis on problems relevant to atherosclerosis and heart disease. Seven research areas are available: (1) regulation of lipid synthesis and intracellular trafficking, (2) structure of lipoproteins, (3) lipolytic enzymes and lipid transfer catalysts, (4) the interaction of lipoproteins with cells and with the arterial wall, (5) the genetics of dyslipoproteinemias, (6) bile acid transport, and (7) the molecular biology of lung surfactant. The approach is a multidisciplinary one, drawing from biochemistry, molecular biology, developmental biology, physiology, biostatistics and epidemiology. Preceptors are: Judith A.K. Harmony, James E. Heubi, John J. Hutton, Richard L. Jackson, Kenneth D.R. Setchell, Richard G. Sleight, Dennis L. Sprecher, M.T. Ravi Subbiah and Jeffrey A. Whitsett. Candidates should be U.S. citizens or permanent residents committed to a research career, hold a Ph.D. or M.D. degree, and have experience in biochemistry, molecular genetics, cell biology, medicine, or immunology. APPOINTMENTS, TO BEGIN AS EARLY AS SEPTEMBER 1, 1987, ARE FOR A MAXIMUM OF 3 YEARS WITH ANNUAL SALARY RANGING FROM \$16,000 to \$30,000. Applications should include a CV, a short summary of research experience and background, and two letters of reference. Address to:

J.A.K. Harmony
Department of Pharmacology and Cell Biophysics
University of Cincinnati College of Medicine
231 Bethesda Avenue
Cincinnati, Ohio 45267-0575.

The University of Cincinnati is an affirmative action/equal opportunity employer.

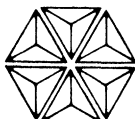
BIOTECHNOLOGY/ CHEMISTRY

Drug Regulatory Affairs

The Bristol-Myers Pharmaceutical Research and Development Division has an excellent career opportunity for a Drug Regulatory Affairs professional at its Syracuse, NY location. Reporting to the Associate Director of Regulatory Affairs, the selected candidate will be responsible for providing broad, highly skilled technical expertise in the areas of biotechnology, chemistry, manufacturing and controls. Will also handle worldwide regulatory affairs submissions for both clinical and marketing applications related to the above areas.

To qualify, you will need an advanced degree in Life or Physical Sciences, preferably in the Biotechnology area, and strong scientific skills. Knowledge of regulatory affairs a plus.

We offer a competitive compensation package and a comprehensive benefits program which includes relocation assistance to a superb upstate NY living area. Interested candidates should submit a resume with salary requirement, in confidence, to: EMPLOYMENT MANAGER



BRISTOL-MYERS COMPANY RESEARCH AND DEVELOPMENT DIVISION

P.O. Box 4755, Syracuse, New York 13221-4755

An equal opportunity employer M/F/H/V

MOLECULAR BIOLOGIST

Pioneer of new scientific breakthrough using gene probe technology to provide DNA fingerprinting for paternity and forensic genetic markets. Small company environment with support of Corporate giant — ICI.

1-2 years postdoctoral experience. Candidates should have a strong background in DNA hybridizations and have a comprehensive training in recombinant DNA techniques. Training in labeling, isolation and detection of radio labeled DNA as well as DNA sequencing methods, oligonucleotide synthesis and gene assembly would be an advantage.

Salary commensurate with ability and experience. Excellent benefits package.

Send resume with salary history to Personnel Director

**CELLMARK
DIAGNOSTICS**
P.O.Box 1000
Germantown, MD 20874

Equal oppty employer, M/F

The Uncommon Company

Marion Laboratories, Inc., headquartered in Kansas City, Missouri, is involved in the development, manufacturing and sales of pharmaceutical, hospital and laboratory products. For the fourth consecutive year, net earnings for Marion Laboratories, Inc. increased more than 50% with net sales of \$500 million. Our continued growth and expansion allows us to seek experienced individuals for the following positions in Kansas City.

SENIOR SCIENTIST, IMMUNOLOGIST

Marion is looking for an individual to develop a total research program in the area of autoimmune diseases. The successful candidate will have a Ph.D. in Pharmacology, Immunology or Biochemistry with at least three years of research experience in autoimmune diseases. The associate will participate in identifying new research areas, in establishing both an internal and external research program, and in developing immunoemodulating agents for clinical testing. Strong interpersonal and communication skills are essential.

PHARMACOLOGIST

Marion is seeking an associate with a background in biochemistry to participate in a drug development team. The associate will assist in the preclinical evaluation of various agents which includes specific enzyme inhibitors. The successful candidate will have a Ph.D. in Pharmacology or Biochemistry and 0-3 years of experience in enzyme reactions and kinetics.

We offer a complete compensation and benefit package to include bonus, stock options, profit sharing, comprehensive group health, dental, and life insurance benefits. Qualified candidates should submit a detailed resume including salary history to: **Marion Laboratories, Recruiting & Placement, Dept. CJL, P.O. Box 9627, Kansas City, MO 64134.**



**Marion
Laboratories, Inc.**

An Uncommon Opportunity

Equal Opportunity Employer

POSITIONS OPEN

DIRECTOR, ENVIRONMENTAL CRITERIA AND ASSESSMENT OFFICE CINCINNATI, OHIO (ECAO-CINC.) \$64,700 to \$70,500

U.S. Environmental Protection Agency (EPA) is seeking highly qualified candidates for the position of Director, ECAO-Cinc. The ECAO-Cinc., a component of the Office of Research and Development, is responsible for preparing human health risk assessment documents, and special reports on water pollution, hazardous wastes, and other program areas for use in developing EPA regulatory actions. The Office is a focal point for collecting and evaluating literature on health hazards to support Agency offices in making regulatory decisions on control of environmental hazards in the United States.

To qualify, applicants must have a degree or equivalent experience in a health science field, e.g., biochemistry, toxicology, pharmacology, physiology; managerial experience in health risk assessment, environmental research, or other health study programs; and meet the technical and executive qualifications described in the Vacancy Announcement. Call/write: Edna Morse, EPA, SES and Executive Resources Unit, PM-224, 401 M Street, SW, Washington, DC 20460. Telephone: 202-382-3328, for the vacancy announcement. Applications must be postmarked by 31 August 1987. EPA is an Equal Employment Opportunity Employer.

DIRECTOR OF RADIOPHARMACY MAYO CLINIC ROCHESTER, MINNESOTA

Mayo Clinic, a large multi-specialty group practice in Rochester, Minnesota, is currently seeking candidate to be the Director of the Radiopharmacy. Individuals should have a Ph.D. and/or an advanced degree with extensive clinical experience. Applicants should be capable of directing a large radiopharmaceutical lab, with extensive knowledge of drug preparation, quality control and dispensing/transportation of all NDA/IND radiopharmaceuticals used in nuclear medicine. The successful candidate will be part of a team of clinicians and scientists whose main goal is to ensure the highest quality routine clinical studies and the development and investigation of new radiopharmaceuticals.

Mayo Clinic offers a competitive salary and benefits based upon qualifications. Please provide a complete curriculum vitae and names and addresses of references to:

Manuel L. Brown, M.D.
C-66 Hilton Building
Mayo Clinic
200 First Street, SW
Rochester, MN 55905

Mayo Clinic is an Equal Opportunity Employer

ELECTRON MICROSCOPIST YALE UNIVERSITY

Ideally with experience in routine EM, pre-, and post-embedding immunocytochemistry, ultracytomicrotomy; will work in neurobiology research laboratory with histological sections and neuronal tissue culture. This is a grant funded position. Send résumé to: J. M. Coutts, Yale University, Department of Human Resources, 155 Whitney Avenue, P.O. Box 1404, Yale Station, New Haven, CT 06520. Yale University is an Affirmative Action/Equal Opportunity Employer.

ENVIRONMENTAL CHEMIST

The Chesapeake Biological Laboratory seeks a marine environmental chemist with emphasis on the behavior of organic contaminants in coastal and estuarine ecosystems to fill a tenure-track faculty position within the University of Maryland's Center for Environmental and Estuarine Studies. While applications at the assistant professor level are encouraged, rank is open and salary competitive. Previous postdoctoral experience is desired. Interest in some teaching in the University's marine science program is desirable. Send curriculum vitae, a statement of research interests, and names of at least three references by 15 September 1987 to:

Dr. Rodger Dawson, Chairman
Chemistry Search Committee
Chesapeake Biological Laboratory
Solomons, MD 20688-0038

The University of Maryland is an Affirmative Action/Equal Opportunity Employer. Applications from women and minorities are particularly sought.

POSITIONS OPEN

ENVIRONMENTAL MONITORING SYSTEMS LABORATORY-RESEARCH TRIANGLE PARK, NORTH CAROLINA (EMSL-RTP) \$64,700 to \$70,500

U.S. Environmental Protection Agency is seeking highly qualified candidates for the position of DIRECTOR, EMSL-RTP. The EMSL-RTP, a component of the Office of Research and Development, is responsible for the planning, management, and implementation of multi-media (air, hazardous wastes, and toxics) research programs; development of instrumentation and analytical methods for the measurement of air pollution; design and implementation of monitoring studies, development and applications of exposure monitoring methods; and management of the Agency's quality assurance program in support of the Clean Air Act.

To qualify, applicants must have a bachelor's or higher degree in either biological or physical sciences or engineering that included training in inorganic and organic chemistry or chemical engineering and statistics and must meet the technical and executive qualifications described in the Vacancy Announcement. Call/write: Edna Morse, EPA, SES and Executive Resources Unit, PM-224, 401 M Street, SW, Washington, DC 20460. Telephone: 202-382-3328, for the Vacancy Announcement. Applications must be postmarked by 31 August 1987. EPA is an Equal Employment Opportunity Employer.

UCLA Engineering Research Center for the Control of Hazardous Substances: Applications are invited for the position of EXECUTIVE DIRECTOR. Coordinate university/industry research programs, workshops; on-line management responsibilities; report to Center Director. Candidates should have a doctorate in engineering, and 25 years of background in relevant industry R&D; senior management experience. Some experience with university programs desirable. Curriculum vitae with three references should be sent to: Dean Nicholas Alexopoulos, Chair, Search Committee, ERC for Hazardous Substances Control, 7400 Boelter Hall, UCLA, Los Angeles, CA 90024-1600.

FACULTY POSITION IN BIOCHEMISTRY MEDICAL COLLEGE OF OHIO

The Department of Biochemistry, Medical College of Ohio, invites candidates to apply for a tenure-track position at the ASSISTANT OR ASSOCIATE PROFESSOR level. The Department is expanding its faculty to include those with research interests that extend its present programs, which include regulation of gene expression, mechanisms of hormone action, protein structure-function relationships, antifolates, protein kinases, posttranslational modification of peptides, peptide hormone analogues, neuroendocrine regulation, membrane receptors, growth factors, and oncogene function. Candidates who employ molecular approaches to their research problems are particularly encouraged to apply. Responsibilities will include establishment of an active research program and participation in the teaching of medical and graduate students. Research facilities within the Department include a core laboratory with state-of-the-art equipment for peptide and oligodeoxynucleotide synthesis, and for protein sequence analysis. Send curriculum vitae, brief summary of research goals, and three letters of reference to: Dr. James H. Freisheim, Professor and Chairman, Department of Biochemistry, Medical College of Ohio, C.S. 10008, Toledo, OH 43699. An Equal Opportunity Employer.

The University of California, San Diego, Department of Chemistry, invites applications for tenure-track FACULTY POSITIONS IN BIOCHEMISTRY, and in all fields of CHEMISTRY (inorganic, organic and physical). Appointments are available at all levels for individuals with outstanding research credentials. Candidate must have a Ph.D. and a demonstrated ability for creative research and teaching at the undergraduate and graduate levels. Salary commensurate with qualifications, and based on University of California pay scale. Candidates should send curriculum vitae, a list of publications, reprints of representative papers, a summary of research plans, and names and addresses of three references to: Chairman (Bio-, Inorganic, Organic, Physical Chemistry), Search Committee, B-032, University of California, San Diego, La Jolla, CA 92093. Prompt response is recommended but all applications received by 15 October 1987 will be given thorough consideration. The University of California is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

FACULTY POSITIONS IN MOLECULAR AND CELLULAR PHYSIOLOGY AND BIOPHYSICS

The Department of Physiology and Molecular Biophysics, Baylor College of Medicine has a multidisciplinary research program on membrane proteins and their role in excitability, transport and signal transduction. Space has been designed to optimize interactions. We are seeking additional faculty with expertise in cellular and molecular biology. Tenure-track positions are available at all levels. M.D. or Ph.D. in appropriate field and postdoctoral training are required. Laboratory space, basic equipment, and initial support are available. Send curriculum vitae, a brief description of past and present research experience, and at least three letters of reference to:

Dr. A. M. Brown, Professor and Chairman
Physiology and Molecular Biophysics
Baylor College of Medicine
One Baylor Plaza
Houston, TX 77030
An Equal Opportunity Employer

FACULTY POSITIONS KING ABDULAZIZ UNIVERSITY FACULTY OF METEOROLOGY, ENVIRONMENT AND ARID LAND AGRICULTURE JEDDAH, SAUDI ARABIA

Applications are being accepted by the Faculty of Meteorology, Environment and Arid Land Agriculture, King Abdulaziz University for the following three faculty positions:

1. HORTICULTURAL SCIENTIST
2. FLORICULTURE SCIENTIST
3. ANIMAL BREEDING SCIENTIST

Applicants should hold a Ph.D. in horticulture, floriculture, animal breeding, or a closely related field, and possess a proven record in teaching and research. Candidates should submit curriculum vitae, including a list of publications, statements of research interests and teaching experience, and three letters of reference to:

Dr. Dwayne A. Suter
Associate Dean
College of Agriculture
Texas A&M University
College Station, TX 77843

In addition to an attractive salary, King Abdulaziz University offers a generous housing and furniture allowance, end of contract gratuity, 60 days of paid summer leave each year, baggage allowance, educational allowance for school-age children, transportation allowance, and annual round-trip air fares.

Term of employment is for 1 year with opportunity for renewal.



FACULTY POSITIONS WAYNE STATE UNIVERSITY

The Department of Molecular Biology and Genetics, with the support of the Molecular Biology Center at Wayne State University, invites applications for multiple tenure-track faculty positions for fall 1988 or earlier hire dates, at the level of assistant, associate, or full professor, depending upon qualifications and experience. Generous start-up funds will be available. These positions are part of a major University-wide expansion in molecular biology. While emphasis is on health related research, candidates with demonstrated research excellence in any area of molecular biology or molecular genetics will be considered. Send applications (deadline: 1 November 1987), including curriculum vitae, the names of at least three references, and a statement of future research plans, to:

Orlando J. Miller, M.D., Chairman
Department of Molecular Biology and Genetics
Wayne State University School of Medicine
540 East Canfield
Room 3216 Scott Hall
Detroit, MI 48201

Wayne State University is an Equal Opportunity/Affirmative Action Employer and actively seeks applications from women and minority groups.

QUALITY ASSURANCE TOXICOLOGIST (TWO POSITIONS)

GS-11/12/13

\$27,172-\$50,346

RESEARCH TRIANGLE PARK, NORTH CAROLINA

The Division of Toxicology Research and Testing (DTRT) of the National Institute of Environmental Health Sciences, National Toxicology Program, Research Triangle Park, North Carolina, is seeking applicants for the position of Quality Assurance Toxicologist within the Quality Assurance Group, DTRT. Primary duties involve developing and managing quality assurance activities related to nonclinical toxicology studies. The incumbent of this position must have a Ph.D., D.V.M., Sc.D. degree or equivalent experience (including research) in toxicology or a directly related field of interest. In addition, this position requires knowledge of quality assurance principles and good laboratory practice regulations, management skill and the ability to assess the progress and adequacy of projects through periodic site visits and review of reports. U.S. citizenship required.

If interested, submit curriculum vitae and the names of three references by September 8, 1987, to:

Johnny L. McLean
Personnel Office, 8 NV-5
National Institute of
Environmental Health Sciences
P.O. Box 12233
Research Triangle Park, NC 27709
(919) 541-7513

AN EQUAL OPPORTUNITY EMPLOYER

National Institutes of Health National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) Division of Kidney, Urologic, and Hematologic Diseases

Academic Physician or Ph.D.—BC/BE with interest in developing the basic scientific aspects of the renal, lower urinary tract, and hematopoietic systems. Full-time position. Time available to pursue research interests. Salary is negotiable, commensurate with qualifications and experience. How to apply: Submit an Application for Federal Employment (SF-171), curriculum vitae, bibliography, and names of three references to:

Mr. Clifford Moss
Personnel Officer, NIDDK
Building 31, Room 9A34
9000 Rockville Pike
Bethesda, MD 20892
Telephone (301) 496-4231

NIH is an equal opportunity employer; women and minorities are encouraged to apply. U.S. citizenship required.

Postdoctoral Scientist Receptor Biology

As part of our expanding R&D activities in biotechnology, the Department of Experimental Pathology at Smith Kline & French Laboratories, located in the suburban Philadelphia area, is seeking a Postdoctoral Scientist to join a collaborative group investigating hepatic metabolism of tissue-type plasminogen activator (tPA). The successful candidate will determine if hepatic uptake of tPA is receptor mediated and will study the mechanism and specificity of uptake and catabolism. It is expected that this work will lead to significant scientific publications. Collaborations with scientists at SK&F and in the scientific community at large will be encouraged. The appointment is for one year, renewable for a second year on mutual agreement. Candidate having experience with radiolabelled ligand binding techniques, affinity chromatography, or immunocytochemistry using colloidal gold labelled ligands are strongly urged to apply.

Candidates are required to have:

- A doctoral degree in Cell Biology, Biochemistry or a related discipline
- 0-3 years postdoctoral experience with receptor assays

- Strong oral and written communication skills
- Experience in handling and maintaining cultured cells and laboratory rodents

Job specifications:

- A doctoral degree in Cell Biology, Biochemistry, or related discipline
- 0-3 years postdoctoral experience with receptor assays
- Strong oral and written communication skills in English
- Experience with cell culture and using radioactive labelled materials
- No known allergies and be willing to work with rodents

We offer an excellent compensation, benefits and relocation package as well as opportunities for personal and professional growth. For confidential consideration, please forward your C.V. and the names of three references to: Mary Ann McCarry-C0042, Senior Employment Consultant-R&D, Smith Kline & French Laboratories, Research & Development, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.

SK&F
A SmithKline Beckman Company

POSITIONS OPEN

FACULTY POSITION AVAILABLE

MOLECULAR/CELLULAR NEUROBIOLOGY. The Department of Anatomy and Cell Biology at the University of California, Los Angeles, invites applications for a tenure-track faculty position that is currently available at the assistant professor level. Applicants must have either an M.D. or Ph.D. degree, and research experience in molecular or cellular neurobiology. Background or interest in neuroendocrinology is preferred. The position includes participation in the departmental teaching program. Please send curriculum vitae, a brief letter describing your research program, and the names of three references to: **Dr. Richard W. Young, Department of Anatomy and Cell Biology, UCLA Medical School, Los Angeles, CA 90024-1763. UCLA is an Affirmative Action/Equal Opportunity Employer.**

GRADUATE RESEARCH ASSISTANTS— AQUATIC ECOLOGY

Assistantships available for the study of structure and function of major reservoir ecosystems are available through the Center of Excellence for Ecosystems Studies. Study and research will lead to M.S. or Ph.D. (joint MSU/University of Louisville). Appointments will be for 12 months, and may be renewed. Contact: **Dr. J. M. King, Chair, Department of Biological Sciences, Murray State University, Murray, KY 42071.**

IMMUNOLOGIST/CHIEF OF LABORATORY OPERATIONS. The clinical oncology laboratory of Allegheny General Hospital located in Pittsburgh, Pennsylvania, is seeking candidates for an entry-level professional staff appointment as Chief of Lab Operations. Minimum requirements include good communication skills, Ph.D. in biosciences, two years of postdoctoral experience in cellular immunology and a commitment to providing quality laboratory services for cancer patients. The laboratory provides specialized diagnostic/prognostic support for the management of patients in our overall oncology program. Successful candidate will assist the lab director in operations and management activities associated with antigen detection, localization, and quantitation, hormonal receptor analysis, peripheral blood cell and tissue phenotype analysis, functional assays of cellular immune competence, antibody production, and protein analysis. Opportunities for developmental studies and collaborative clinical research activities. Please send detailed professional information and names of two references to: **Human Resources Department, Allegheny General Hospital, 320 East North Avenue, Pittsburgh, PA 15212. Equal Opportunity Employer.**

IMMUNOLOGIST— EXPERIMENTAL PATHOLOGIST

A tenure-track position exists at the assistant professor or associate professor level for an immunologist interested in investigating immune defense mechanisms. The successful candidate will be provided the opportunity to develop his/her own independent research program and to interact with other researchers engaged in studying immunity to infectious agents, tumors and allografts.

Trudeau Institute is a free-standing, not-for-profit pure research institute located on the shore of Saranac Lake, 10 miles from Lake Placid, NY.

Send résumé and the names of three references to:

**Dr. Robert J. North, Director
Trudeau Institute
P.O. Box 59
Saranac Lake, NY 12983**

IN VIVO NMR SPECTROSCOPY. The Department of Radiology of the University of Iowa invites applications for a position in NMR spectroscopy. The University Hospitals is obtaining a 1.5T whole-body MR system with spectroscopic capabilities, and will be initiating research aimed towards eventual clinical application of in vivo MR spectroscopy. MR imaging is currently performed on a 0.5T system. The successful candidate will develop an active research program and collaborate with other investigators. A Ph.D. in chemistry, biochemistry, or related field is required. Experience with in vivo NMR is required.

Contact: **E. A. Franken, Jr., M.D., Chairman, Department of Radiology, University of Iowa, Iowa City, IA 52242. The University of Iowa is an Affirmative Action/Equal Opportunity Employer.**

APPLIED MATHEMATICIAN

Boehringer Mannheim is a rapidly growing leader in the field of medical diagnostics and medical research. This leadership has been attained through emphasis on quality and team effort and Boehringer Mannheim employees are responsible for the growth and leadership. Due to this growth, we are currently seeking a qualified individual for the following opportunity in our INDIANAPOLIS corporate headquarters.

Will implement packaged and tailored algorithms for support of research and commercial systems. Requires B.S. degree in Computer Science, Chemistry, Engineering, Physics or Mathematics with 5 years experience to include convolutions techniques, database work, curve fitting and statistical techniques.

At Boehringer Mannheim we offer an exciting and challenging work environment as well as excellent compensation and benefits programs. If you meet the above requirements and would like to join an organization that is a leader in its field, please send your resume with salary history for confidential consideration. To inquire about other opportunities not listed above, please call our job line at (317) 845-7035.

**Dept. MZS
Human Resources
Boehringer Mannheim
P.O. Box 50100
Indianapolis, IN 46250-0100**

**BOEHRINGER
MANNHEIM
DIAGNOSTICS**



An Equal Opportunity Employer

INDUSTRIAL TOXICOLOGIST

A

t Hoffmann-La Roche, one of the world's largest and most successful pharmaceutical/medical research companies, we understand that curing the world's ills begins with protecting our own employees. This commitment has created an opportunity for a knowledgeable, experienced toxicology professional to evaluate a broad range of toxicity data and assess potential health hazards.

Your important and diverse responsibilities will include evaluating toxicity data, reviewing literature and making recommendations for appropriate input for material safety data sheets and hazard warning labels; evaluating new and existing syntheses/processes for potential hazards; and working with testing laboratories to plan toxicity studies.

The insightful individual we're seeking will have a Doctorate in Toxicology (or its equivalent), along with extensive undergraduate or graduate level studies (or experience) in Industrial Hygiene. A working knowledge of practical toxicology and at least two years of related experience is required; excellent interpersonal/communication skills and highly developed problem-solving abilities are important.

In return for your skills, we offer a competitive salary, outstanding benefits, and the support of an organization committed to the health and welfare of both our employees and the general public. For consideration, please send your resume, indicating salary history and requirements (those without this information will not be acknowledged), to: **Mr. John Nathan, Dept S814, Hoffmann-La Roche Inc., Nutley, New Jersey 07110.** We are an equal opportunity employer.



Hoffmann-La Roche

Working Today For a Healthier Tomorrow.

Research Opportunities in Biotechnology

Department of Biotechnology Research at Pioneer Hi-Bred International, Inc. is seeking applicants for our ongoing program of crop improvement. Pioneer offers competitive salaries, excellent facilities and a highly cooperative research environment. Successful candidates will be expected to interact extensively with ongoing programs in transformation, regeneration and gene isolation programs.

Cell Biologist...

To develop further the cell biology program for transformation and in vitro selection of corn and sunflower. The position is well supported with technical assistance. A Ph.D. or equivalent in biology, botany or plant physiology with relevant research experience in cell biology/tissue culture is required.

Post Doctoral Position in Molecular Biology...

To participate in projects involved in identification, isolation and characterization of genes from corn. Research will be directed to understanding the role of different DNA sequences in gene expression. The applicant should have a Ph.D. Degree or equivalent in biology or related disciplines with experience in molecular biology.

Molecular Biologist...

To participate in original research projects on the molecular biology of plant viruses and disease resistance and perform standard molecular procedures including cDNA cloning and nucleic acid sequencing. A BS/MS or equivalent in molecular biology or related biological subject with at least two years of laboratory experience.

Biochemist...

To support our ongoing biotechnology research programs in plant transformation and gene isolation. Successful applicants will have a BS/MS in biochemistry or equivalent with at least five years of laboratory experience. In addition, preference will be given to candidates who have expertise in the following areas: enzyme kinetics, protein purification, plant metabolism, immunochemistry, radioisotopes and chromatography methods.

Send resume and indicate which job you are applying for with at least three references to:



Lisa Wilson
Pioneer Hi-Bred International, Inc.
7300 N.W. 62nd Avenue, P.O. Box 38
Johnston, Iowa 50131

®Registered trademark of Pioneer Hi-Bred International, Inc., Des Moines, Iowa

SCIENTISTS AND RESEARCH ASSOCIATES

SIBIA is an established biotechnology company involved in a wide spectrum of innovative research programs. SIBIA, with a staff comprised of leading scientific staff members, provides an exceptional scientific research environment in which to work, plus a modern laboratory located near the ocean on Coast Boulevard in La Jolla. A broad range of research programs encourage multidisciplinary interaction.

Applications are requested for Scientists and Research Associates in:

MOLECULAR CELL BIOLOGY

BS/MS in molecular biology, microbiology or biochemistry. Experience with recombinant DNA techniques such as cloning, nucleic acid sequencing, and nucleic acid hybridization analysis desirable. Yeast systems also desirable.

Postdoctoral position for Ph.D. in Biochemistry/Molecular Biology with experience in receptor biochemistry. Studies include receptor purification and gene cloning.

MOLECULAR VIROLOGY

To develop gene transfer systems. Experience with animal virus systems (especially retroviruses) and tissue culture techniques required. Requires background in recombinant DNA and immunological techniques.

Positions available for Research Associates with two or more years applicable experience, and Postdoctorates and Staff Scientists with appropriate background.

CHEMISTRY

PH.D. CHEMIST - Research in DNA-based Diagnostics, Enzyme and Non-Enzymatic Detection Systems. Background: Organic/Bioorganic Chemistry with one to two years postdoctoral experience. Synthetic Organic and Nucleic Acid Chemistry and Enzymology experience required. Instrumentation development desirable.

MICROBIOLOGY

ANAEROBE MICROBIOLOGIST - Microbiology and Physiology of anaerobic and aerobic bacteria. Isolation, characterization, identification, and physiology of diverse environmental bacteria. Prefer experience in microbial physiology, GC, HPLC, anaerobe microbiology, fluorescent microscopy, computers. M.S. or equivalent.

We offer a comprehensive benefits package and competitive salaries. For confidential consideration, please submit your curriculum vitae, a statement of research interests and goals, and the names of three professional references to **SIBIA, Department 4060, 505 Coast Boulevard South, La Jolla, CA 92037**. Equal Opportunity Employer.

**THE SALK INSTITUTE
BIOTECHNOLOGY/INDUSTRIAL
ASSOCIATES, INCORPORATED**

PHARMACOLOGIST MOLECULAR

Ayerst Laboratories, a subsidiary of Fortune 100 American Home Products Corporation, anticipates an opening at their state-of-the-art research facility located in the Princeton, New Jersey area, for a Molecular Pharmacologist to work within the department of Pharmacology and participate in the establishment of novel approaches to drug discovery and elucidation of the mechanisms of drug action. Involvement with various ongoing research areas within the department will be emphasized.

The appropriate candidate would have a PhD degree with a minimum of 3 years of postdoctoral and/or industrial experience in the area of second messenger regulation of cellular activity. Experience in cyclic nucleotide biochemistry, and in the purification and characterization of phosphodiesterases and/or cyclic nucleotide-dependent protein kinases is strongly desired. Candidates should possess highly developed oral and written communication skills and a strong publication record.

Ayerst offers an excellent salary and benefits package with opportunities for career advancement. Interested candidates should submit a resume with salary requirements to:

Personnel Manager, Dept. DG



**AYERST
LABORATORIES
RESEARCH, INC.**

CN 8000
Princeton, NJ 08543-8000
Equal Opportunity Employer M/F/H

Research Opportunities

Monsanto Corporate Research has two immediate openings available in the Biological Sciences Department in St. Louis, Missouri.

The positions will involve the isolation and characterization of genes involved in the control of the immune or nervous systems.

The requirements for these positions are a BS or MS in Chemistry, Biochemistry or Molecular Biology and at least 1-3 years' experience in molecular genetics. Experience in animal cell culture is preferred. Send your resume to: John Bussen; MONSANTO COMPANY; 700 Chesterfield Village Parkway; Department DB5B-Sc; Chesterfield, MO 63198. An Equal Opportunity Employer M/F/H/V.

Monsanto



**The University
of
British Columbia**

Biotechnology Laboratory

The University of British Columbia has recently initiated the Biotechnology Laboratory under the directorship of Dr. Michael Smith. Its objective is to foster an interactive approach to problems in biotechnology, with emphasis in the areas described below. A total of ten new tenure track positions will be filled during 1987-89. Appointments will be primarily at the rank of Assistant Professor (possibly higher in a few exceptional cases). Applicants must have a Ph.D. degree. Post-doctoral experience is an asset. Successful candidates will be expected to develop their own vigorous research programs and to collaborate with other faculty members on problems in one of the following areas: human, animal, plant and forest biology and in fermentation and process engineering and bio-instrumentation (with special emphasis on mammalian cell culture and the production of specific proteins) and in the application of genetic engineering techniques to these problems. Substantial start-up funding will be provided. Faculty appointed to the Biotechnology Laboratory will have a joint appointment in an appropriate academic Department and will teach and supervise undergraduate and/or graduate students in that Department's programs or in academic programs to be established under the aegis of the Biotechnology Laboratory. At this time, candidates are sought with research expertise in the following areas:

FERMENTATION AND PROCESS ENGINEERING AND BIO-INSTRUMENTATION (2 positions). The application of fermentation techniques to the growth of animal cells in culture.

PLANT AND FOREST BIOLOGY (1 position). The application of molecular genetics to problems in plant and forest biology or to the biology of soil microorganisms or pathogens.

HUMAN AND ANIMAL BIOLOGY (2 positions). The application of molecular genetics to solution of problems related to human inheritance, in neurobiology, membrane channels, or infectious organisms.

Additional positions will be advertised at a later date.

Appointments will be made starting 1st January 1988 or as soon as possible thereafter. **Closing date for applications, 30th September 1987.** Salary will be commensurate with qualifications and experience. The University of British Columbia offers equal opportunity for employment to qualified female and male applicants. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

Applications, including a full c.v., plans for future research and the names and addresses of three references, should be sent to: Mrs. Darlene Crowe, Administrative Assistant, Biotechnology Laboratory, The University of British Columbia, c/o Dean of Science, 6270 University Boulevard, Vancouver, B.C., Canada V6T 1W5.

Post Doctoral Associate

A position is open immediately in the Department of Animal Research for a recent Ph.D to investigate aspects of drug targeting. The candidate should have experience with small animal techniques, biodistribution/pharmacokinetic assessments and liver perfusion methods. Experience with tumor xenograft models would be desirable. Send curriculum vitae and the names of three references to: Employee Relations Manager, XOMA Corporation, 2910 Seventh Street, Berkeley, CA 94710. An Equal Opportunity Employer.



**XOMA
CORPORATION**

Biotechnology Research and Development

Pandex, a division of Baxter Healthcare Corporation, is developing state of the art products for medical diagnostics.

We are expanding our R&D group and offer unique opportunities for creative Ph.D. level Scientists interested in positions that offer challenging opportunities for professional career growth.

We are seeking the following key individuals:

Nucleic Acid Chemist - Ph.D. with 0-3 years postdoctoral experience in DNA/RNA synthesis.

Molecular Biologist - Ph.D. with 2-3 years postdoctoral experience in DNA cloning and synthesis of DNA probes.

Assay Development Scientists - Ph.D. with 3-5 years postdoctoral or industrial experience in immunology, virology or microbiology with knowledge of immunoassay techniques.

Virologist - Ph.D. with 0-3 years postdoctoral experience or equivalent in retrovirology.

Microbiologist - Ph.D. with 0-3 years postdoctoral experience in the area of STD's.

As a division of a multi-billion dollar leader in the healthcare industry with research facilities located 30 miles north of Chicago, we offer a competitive starting salary and an excellent benefits program.

If you would like to be considered, please send your resume in confidence to: Anne McNicholl, Personnel Director, Baxter Healthcare Corporation, Pandex Division, 909 Orchard Street, Mundelein, IL 60060. We are an equal opportunity employer.

Pandex Division

Baxter

NASA National Aeronautics and Space Administration

PHYSIOLOGISTS

CARDIOVASCULAR PHYSIOLOGISTS (2 POSITIONS)

Conduct research on the effects of space flight on the cardiovascular system. Focus on cardiac and cardiovascular changes in long-term microgravity, partial gravity, artificial gravity, hypergravity, and on return to normal gravity. Carry out ground-based simulations (e.g., bedrest, water immersion) and flight experiments with appropriate instrumentation for determining the fundamental mechanisms of change. Develop and test concepts for countermeasures against the deconditioning of space flight. Two positions are available.

The first involves research on the human cardiovascular system and includes the planning, coordination, and direction of an intra- and extra-mural cardiovascular research program. Applicants must have an advanced degree in physiology or medicine with a minimum of three years of independent research experience in cardiovascular physiology. Salary: \$45,763 - \$69,976. (Announcement 14-87).

The second position is for research on the cardiovascular system of mammals, especially primates. Applicants must have an advanced degree as above with demonstrated research expertise in mammalian cardiovascular physiology. Salary: \$32,562 - \$50,346. (Announcement 15-87).

MUSCLE PHYSIOLOGIST (1 POSITION)

Performs original research on the mechanisms and environmental factors which regulate skeletal muscle mass and function. Investigates the specific skeletal muscle changes which occur in microgravity-induced muscle atrophy in animal models and human beings, evaluates various countermeasures, and develops or evaluates procedures for monitoring muscle mass and function during spaceflight. Applicants must have an advanced degree in physiology or allied sciences with a minimum of three years of independent research experience in skeletal muscle structure and function, and a record of contributions to the field. Salary: \$45,763 - \$59,488. (Announcement 10-87).

For further information write to Jack Cormode or Sharon Scharmen, at the address below or phone (415) 694-5605. Technical inquiries should be directed to Dr. John H. Billingham, Chief, Life Science Division, at (415) 694-5181. Formal applications should be filed by September 30, 1987. Positions located at Ames Research Center near the Silicon Valley.

an equal employment opportunity/affirmative action employer

NASA-Ames Research Center
Attn: AHM 241-32
Moffett Field, CA 94035

POSITIONS OPEN

Yale University **INVERTEBRATE PALEONTOLOGIST**. The Department of Geology and Geophysics is soliciting applications for an assistant professor in invertebrate paleontology to begin in the academic year 1988 to 1989. A curriculum vitae, list of publications, and the names of three references should be sent by 1 October 1987 to: **Karl K. Turekian, Chairman, Department of Geology and Geophysics, Yale University, Box 6666, New Haven, CT 06511.**

Yale University is an Equal Opportunity/Affirmative Action Employer and encourages applications from all qualified scientists.

JUNIOR FACULTY POSITION

The Department of Chemistry at the University of California, Santa Cruz, invites applications for a position at the assistant professor level, effective fall 1988. We are particularly interested in candidates with research interests in biochemistry and biophysics. The successful candidate will be expected to teach at both the undergraduate and graduate levels, and should have an outstanding record of research accomplishments. Curriculum vitae, a brief summary of research interests, and letters of recommendation from three references should be sent to: **David Kliger, Chairperson, Department of Chemistry, University of California, Santa Cruz, CA 95064.** Application materials should be received by 30 September 1987. Please refer to Provision 102-878. *The University of California is an Equal Employment Opportunity/Affirmative Action/IRCA Employer.*

UNIVERSITY OF OTAGO DUNEDIN, NEW ZEALAND LECTURER IN GENETICS

Applications are invited for a lectureship in genetics which is taught as an interdepartmental course in the Faculty of Science. Candidates should have a good record of research in some area of genetics and be able to teach "classical" genetics. Some preference may be given to applicants with particular interests in cytogenetics, population, evolutionary, or ecological genetics. The person appointed will be attached to a department in the faculty appropriate for their interests and expertise (probably botany), and would be expected to make some contribution to the teaching of that department.

Salary: Appointment will be made at an appropriate level, according to qualifications and experience, on the lecturer's scale, which ranges from \$NZ32,000 to \$NZ38,500.

Further information may be obtained from: **The Registrar, University of Otago, P.O. Box 56, Dunedin, New Zealand.**

Applications quoting reference number A87/32 close in Dunedin on 28 August 1987.

MEDICINAL CHEMIST

Medicinal chemist needed to participate in teaching undergraduate and graduate pharmaceutical chemistry courses. Must also be able to engage in collaborative research with department faculty. Appointment is for limited term with potential, if qualified and eligible, for future tenure-track consideration. Send applications and three letters of reference to: **Dr. Robert T. Louis-Ferdinand, Department of Pharmaceutical Sciences, Room 528 Shapero Hall, College of Pharmacy and Allied Health Professions, Wayne State University, Detroit, MI 48202. Telephone: 313-577-1737. Affirmative Action/Equal Opportunity Employer.**

MOLECULAR BIOLOGISTS—The Lawrence Berkeley Laboratory, University of California, invites applications for positions in The Human Genome Center to be part of a program to develop a physical map of the human genome, and eventually to sequence portions of this genome. Applicants are sought at the Ph.D., as well as the A.B. or B.S. level, for appointments at the staff scientist, postdoctoral, or technician levels. Experience in DNA manipulations and other relevant molecular biological procedures is required. Experience in yeast molecular biology and genetics also will be considered, since part of this project will involve construction of artificial chromosomes containing human DNA that can be propagated in yeast. Salary will depend on experience and professional level. Send résumé and names of three references to: **Dr. Robert K. Mortimer, Biology and Medicine Division, Donner Laboratory, Lawrence Berkeley Laboratory, Berkeley, CA 94720. An Equal Opportunity Employer M/F/H.**

POSITIONS OPEN

MICROBIAL ECOLOGIST/ OCEANOGRAPHER

A microbial ecologist with primary interests in bacterioplankton and bacteriophages as agents of carbon and nitrogen flows in estuarine, coastal, and oceanic waters is being sought by the Horn Point Environmental Laboratories, Center for Environmental and Estuarine Studies, University of Maryland. The successful applicant will work on interdisciplinary programs with other biologists, and with physical oceanographers and modelers to examine microbial oceanographic processes in an ecological and hydrodynamic context. Experience with modeling and advanced particle analysis instrumentation (HPLC, flow cytometry, video microscopy, and image analysis) preferred. Applicant will be expected to develop independent research programs, direct graduate students, and participate in teaching in the University's marine science graduate programs. The position is tenure-track in the University of Maryland system with rank and salary open at the associate professor or professor levels.

A letter of application accompanied by a signed, current curriculum vitae, and the names of five individuals who may be contacted as references should be sent to: **Dr. Dennis L. Taylor, Horn Point Environmental Laboratories, University of Maryland, P.O. Box 775, Cambridge, MD 21613.**

The deadline for applications is 15 October 1987. Applications received after that date will be considered only if received prior to the date of a final decision. *The University of Maryland is an Equal Employment Opportunity/Affirmative Action Employer.*

THE UNIVERSITY OF CALGARY FACULTY OF MEDICINE MOLECULAR OR DEVELOPMENTAL BIOLOGY

Applications are invited for faculty positions at the **ASSISTANT OR ASSOCIATE PROFESSOR** level. Applicants should possess a Ph.D. and/or M.D. degree and a minimum of 2 years of postdoctoral experience and a proven record of excellence in research in the general area of eukaryotic gene regulation and the molecular biology of development. Successful candidates will be eligible to apply for salary and establishment funding support by competitive application to the Alberta Heritage Foundation for Medical Research. Establishment support covers costs of setting up a new laboratory with major/minor equipment and operating funds for a 2-year period. Rank and remuneration will be appropriate for qualifications and experience. Successful applicants will be expected to devote at least 75% of their time to their research program. The closing date for receipt of complete applications is 15 September 1987.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. However, all other qualified interested individuals are encouraged to apply.

The University of Calgary is an Equal Opportunity Employer.

Applications should include a detailed curriculum vitae, a synopsis of research interests, two reprints of recent publications, and applicants should arrange to have three letters of reference sent directly to: **Dr. Kostas Iatrou, Chairman, Search Committee, Department of Medical Biochemistry, Faculty of Medicine, The University of Calgary, 3330 Hospital Drive N.W., Calgary, Alberta T2N 4N1, Canada.**

PHARMACOLOGIST, GS-403-12. Naval Health Research Center in San Diego needs pharmacologist to plan and conduct behavioral pharmacological research studies of effects of pharmacological agents on health, performance, sleep, alertness, and autonomic function in human subjects. A doctorate degree or equivalent in pharmacology with specialization in effects of pharmacological agents on human subjects, SF171, and transcripts are required. **Telephone: J. Banks, 619-225-2911 for information.**

POSITIONS OPEN

MOLECULAR BIOLOGIST

The Research Division of Henry Ford Hospital is establishing a fundamental research program in molecular biology. Currently, several investigator positions are planned, including that of Program Director. Areas of specific research interest have not yet been rigidly defined, but include lymphocyte activation and differentiation, gene expression, oncogenes, lymphokines, growth factors, transplantation biology, immunology, and gene identification/isolation. Substantial resources will be available including the possibility of academic affiliations.

Applicants for Program Director are expected to be acknowledged leading scientists with an outstanding publication record and a history of peer-reviewed grant support. Applicants for a staff investigator position will have completed several years of postdoctoral study and will be expected to develop a strong research program capable of attracting extramural funding.

Applicants interested in the positions should forward curriculum vitae and three reference contacts to: **Dr. Joseph D. Shore, Director of Research, Henry Ford Hospital, 2799 West Grand Boulevard, Detroit, MI 48202.**

OCEAN MODELER/DYNAMICIST

Ph.D. scientist for research and ocean prediction work with group actively engaged in research in dynamics, modeling, and real-time forecasting to attack the problem of mesoscale variability in the North Pacific. A systematic approach involving dynamical model forecasts and data assimilation with remotely sensed and dedicated in situ data sets is intended. Degree and experience in oceanography, meteorology, fluid dynamics, or applied mathematics required. Applications from qualified female and minority group members are especially welcome. Please apply with résumé and references or address inquiries to:

**Professor Allan R. Robinson
Harvard University
Division of Applied Sciences
29 Oxford Street
Cambridge, MA 02138**

PHARMACOLOGY

The School of Pharmacy, Campbell University, invites applications for a 12-month, tenure-track **FACULTY POSITION** in the Department of Pharmaceutical Sciences. Rank and salary are negotiable and commensurate with the applicant's qualifications and experience. Candidates for the position should hold a Ph.D. degree and have broad training in pharmacology. Responsibilities include the development and maintenance of an active research program, and instruction in the Pharm.D. curriculum. Excellence in teaching is expected. Interested applicants should send their curriculum vitae, summaries of their research interests and objectives, and three letters of reference to: **Dr. Robert Greenwood, Acting Chairman, Department of Pharmaceutical Sciences, School of Pharmacy, Campbell University, Buies Creek, NC 27506. An Equal Opportunity Employer.**

PHARMACOLOGY/TOXICOLOGY FACULTY

The University of Kentucky College of Pharmacy invites applications for two tenure-track faculty positions at any rank. Postdoctoral experience and potential for development of an independent, extramurally funded research program are required. A pharmacy background is desirable. Opportunities exist for associations with University interdisciplinary Centers (e.g., Toxicology, Aging, Cancer, etc.). Curriculum vitae and names of three references should be sent by 30 September 1987 to: **Dr. William C. Lubawy, Interim Dean, University of Kentucky, College of Pharmacy, Lexington, KY 40536-0082. The University of Kentucky is an Equal Opportunity Employer.**

PHARMACOLOGIST

Pharmacologist needed to participate in teaching undergraduate and graduate pharmacology courses. Must also be able to engage in collaborative research with department faculty. Appointment is for limited term with potential, if qualified and eligible, for future tenure-track consideration. Send applications and three letters of reference to: **Dr. Robert T. Louis-Ferdinand, Department of Pharmaceutical Sciences, Room 528 Shapero Hall, College of Pharmacy and Allied Health Professions, Wayne State University, Detroit, MI 48282. Telephone: 313-577-1737. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL SCIENTIST IMMUNODIAGNOSTICS

Becton, Dickinson and Company Research Center in dynamic Research Triangle Park, N.C. has two postdoctoral opportunities beginning in 1987. You will be involved with research in the expanding immunodiagnosics field and will be working with experienced scientists in state-of-the-art laboratories.

Candidate requirements are a Ph.D. in Biochemistry or Immunochemistry with demonstrable capabilities in creative thought and energetic application. A working knowledge of organic synthesis is preferred. Current interests should include non-isotopic immunoassay, analytical biochemistry or protein chemistry including isolation, purification, conjugation to small and large molecules on solid surfaces.

This is a one year appointment with a second year renewal option available. We offer 4 weeks paid vacation and a salary commensurate with your experience. Persons wishing to learn more about this opportunity or wishing to make application, should direct inquiry or curriculum vitae to: **Dr. Daniel Wagner, BECTON DICKINSON RESEARCH CENTER, P.O. Box 12016, Research Triangle Park, N.C. 27709. (919) 549-8641.**

BECTON DICKINSON

AA/EEO Employer

STUDY TOXICOLOGIST

GS-11/12/13

\$27,172-\$50,346

RESEARCH TRIANGLE PARK, NORTH CAROLINA

The Division of Toxicology Research and Testing (DTRT) of the National Institute of Environmental Health Sciences, National Toxicology Program, Research Triangle Park, North Carolina, is seeking applicants for the position of Study Toxicologist to characterize the toxicological effects from exposure of laboratory animals to chemicals and to evaluate and publish study results. DTRT is responsible for developing, validating and evaluating methods for toxicologic characterization of chemicals and other environmental agents; short-term and long-term toxicology and carcinogenesis studies to establish toxicity of chemicals and other environmental agents; collaboration with other government agencies and dissemination of results to the scientific community and regulatory agencies. Incumbents must possess a Ph.D., D.V.M., Sc.D. degree or equivalent experience (including research) in toxicology or a directly related field of interest. U.S. citizenship required.

If interested, submit curriculum vitae and the names of three references by September 8, 1987, to:

**Johnny L. McLean
Personnel Office, 8NV-55
National Institute of
Environmental Health Sciences
P.O. Box 12233
Research Triangle Park, NC 27709
(919) 541-7513**

AN EQUAL OPPORTUNITY EMPLOYER



National
Defence

Défense
Nationale

Civilian Employment

Department of National Defence
Canada

Applications are invited from new graduates, students graduating within the coming year or recent graduates employed as Post Doctoral Fellows to meet present and future needs for civilian Defence Scientists. You would be joining a team of over 550 Defence Scientists distributed across seven research establishments in Canada who are involved with applied research and development: social, economic, and strategic analysis; and operational research. The main locations are near Halifax, Quebec City, Ottawa, Toronto, Victoria, and Medicine Hat (Alberta).

Fields and Specialties:

Biology — microbiology, pharmacology, toxicology, physiology, biophysics, radiobiology

Chemistry

Computer Science

Economics

Engineering — except forestry and geology

History — military

Mathematics — applied mathematics and operational research

Physics

Psychology — experimental

Political Science — strategic studies, international relations

Sociology

High academic standings and a Master's or Doctorate degree in one of the above fields from a recognized university are required. These opportunities are limited to Canadian citizens only. Due to the nature of the work, all employees will require security clearance. Starting salaries range from \$25,000 to \$40,000 dependent on individual qualifications. Benefit levels and salary advancement patterns are fully competitive.

Further information may be obtained at the address given below.

To apply, forward your résumé and/or application form indicating your primary fields of interest. Please enclose copies of all your academic transcripts and the names and addresses of three individuals who may be contacted in reference to your professional abilities to:
**Director of Defence Scientist Personnel Programs
National Defence Headquarters
Ottawa, Canada, K1A 0K2
Attention: DDSPP-4**

Personal information you provide is protected under the Privacy Act. It will be held in personal information bank DND/P-SE-902.

The Department of National Defence is an Equal Opportunity Employer.

Canada

POSITIONS OPEN

PHYSICS LIBRARIAN: Full-time position available at University of Wisconsin-Madison General Library System. Salary minimum: \$25,439. For announcement, write: **Priscilla Neill, Assistant Director for Personnel**, 728 State Street, Madison, WI 53706. Application deadline: 15 September 1987.

PLANT GENETICIST: The Department of Vegetable Crops, University of California, Davis, seeks a Plant Geneticist to fill an 11-month, tenure-track position as assistant/associate/full professor and geneticist in the Agricultural Experiment Station.

The individual will be expected to utilize classical and molecular approaches in developing a research program which contributes to the genetic understanding and improvement of tomatoes for processing. Potential research areas might include quantitative or population genetics, developmental genetics, genome evolution, or plant/pest interactions. The appointee will have the opportunity to exploit the extensive tomato genetic resources available in the department. The individual is also expected to participate in advising and training students. Teaching responsibilities will be within the appointee's area of specialization. A Ph.D. degree in genetics or closely allied field is required. Submit curriculum vitae with a bibliography, official transcripts, list of publications (and reprints of pertinent papers), a statement of research and teaching interests, and names and addresses of three references to: **Dr. D. Nevins, Chairperson, Department of Vegetable Crops, University of California, Davis, CA 95616**. Applications must be received by 15 September 1987. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

ENVIRONMENTAL PROTECTION AGENCY CORVALLIS, OREGON

PLANT PHYSIOLOGIST/MODELER—Determine effects of air pollution on forest and vegetation resources; develop and quantify models to describe and predict the effects of air pollutants on woody vegetation on a regional basis. The incumbent must be a nationally recognized technical authority in the general field of plant physiological process models, preferably with woody species, and have authoritative and comprehensive knowledge, experience, and training in the forest sciences, preferably physiology. The incumbent must have an advanced degree (Ph.D.) in quantitative physiology/biology, forest sciences, plant physiology, or a closely related discipline. U.S. citizenship required. Salary is commensurate with experience (\$45,763 to \$59,488). For information on this position, contact: **Dr. Robert T. Lackey, telephone: 503-757-4806**. To obtain an application package and instructions, contact: **The Office of Personnel Management (Seattle), telephone: 206-442-4356**. To apply (closing date 30 September 1987), send completed and signed application to: **U.S. Office of Personnel Management, Seattle Area Office, 915 Second Avenue, Seattle, WA 98174**.

An Equal Opportunity Employer

POSTDOCTORAL POSITIONS

Two positions are available immediately for Ph.D.'s with a strong background in biochemistry, pharmacology, xenobiotic metabolism, enzymology, biochemical toxicology, organic or medicinal chemistry. Research projects under investigation include: Chemical modification and photoaffinity labeling of purified isozymes of cytochrome P-450, synthesis of mechanism-based inactivators of cytochrome P-450 and the characterization of their mechanism of action, and studies on the metabolism of nitrosamine carcinogens and other xenobiotics in vivo and in vitro (isolated hepatocytes, microsomes and purified isozymes of cytochrome P-450). Send curriculum vitae, a brief statement of research experience, and the names of three references to: **Dr. Paul F. Hollenberg, Chairman, Department of Pharmacology, School of Medicine, Wayne State University, 540 East Canfield, Detroit, MI 48201**. *An Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION—MOLECULAR ENZYMOLOGY. A position is available to study the mechanisms of action and structure of phosphotriesterase, bacterial luciferase, or carbamoyl phosphate synthetase. Applicants should have an interest and/or expertise in stopped-flow kinetics, NMR, or recombinant DNA methodologies. Salary range is \$18,000 to \$20,000. Send curriculum vitae and the names of three references to: **Dr. Frank M. Raushel, Department of Chemistry, Texas A&M University, College Station, TX 77843**. *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

POSTDOCTORAL POSITION in pulmonary biology, physiology and toxicology available immediately to conduct NIH-funded research on neonatal oxygen toxicity. Multidisciplinary research approaches combine biophysical, biochemical, and cell biological techniques to investigate the mechanisms of acute and chronic hyperoxic lung injury. Candidates with a Ph.D. in biochemistry, physiology, or toxicology and a strong background in fields related to either lipid metabolism, respiratory physiology, or cell biology are invited to send curriculum vitae, reprints and names of references to: **Drs. J. N. Finkelstein or R.H. Notter, Department of Pediatrics, University of Rochester School of Medicine, Box 777, 601 Elmwood Avenue, Rochester, NY 14642**. *Affirmative Action/Equal Employment Opportunity.*

POSTDOCTORAL POSITION available immediately for 2 years to aid in the development of neuron-based biochemical microsystems. Research is an interdisciplinary effort between neuroscientists (**C. D. Barnes and S. J. Fung**) and engineers (**B. J. Van Wie**). Techniques include intra/extracellular recording, immunocytochemistry, use of voltage-sensitive dyes, tissue culture, and mathematical modeling. Send curriculum vitae and names of three references to: **Bernard J. Van Wie, Chemical Engineering Department, Washington State University, Pullman, WA 99164-2710**. Annual salary: \$18,000 to \$21,000. Closing date: 1 October 1987. *Washington State University is an Equal Opportunity/Affirmative Action Employer*

POSTDOCTORAL POSITION available immediately. The project involves investigation of the molecular mechanism of respiratory irritation and sensitization through identification and purification of in vivo targets resulting from inhalation exposure to isocyanates. Methods to be employed include protein isolation and purification, protein sequence and composition analysis, immunochemical, and radioisotopic techniques. Contact: **Dr. William E. Brown, Department of Biological Sciences, Carnegie Mellon University, 4400 Fifth Avenue, Pittsburgh, PA 15213**. *CMU is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION now available to study growth regulation and carcinogenesis in a novel system of bile ductular cells in culture and in vivo. Focus will be on defining specific growth factors and investigating the properties of bile ductular cells following transformation. Also, there is an excellent opportunity to participate in an exciting new program in experimental pathology. Candidates should be recent Ph.D.'s or equivalent with laboratory experience in cell and molecular biology and in cell culture techniques. Send curriculum vitae and three letters of reference to: **Dr. A. E. Sirica, Department of Pathology, Medical College of Virginia, Box 662 MCV Station, Richmond, VA 23298-0662**.

MCV/VCU is an Equal Opportunity/Affirmative Action Employer. Minority and women candidates are encouraged to apply.

POSTDOCTORAL POSITION available immediately for biophysical studies of membrane-bound, ion transport proteins. Work will involve the application of fluorescence and kinetic techniques to the investigation of bacterial rhodopsins and the calcium ATPase. Send curriculum vitae and three references to: **Dr. Gregg Dewey, Department of Chemistry, University of Denver, Denver, CO 80208**.

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

POSTDOCTORAL POSITION AVAILABLE

A position is available immediately to study the regulation of oncogene expression and DNA methylation in experimental colon carcinogenesis. The applicant should have experience in molecular biology and, in particular, with the techniques of plasmid preparation, bacterial transformation, restriction endonuclease digestion, and preparative electrophoresis. Salary range: \$19,000 to \$23,000 depending on experience.

Send curriculum vitae and two references to:

Dr. Thomas Brasitus
Director, Section of Gastroenterology
University of Chicago Box 400
5841 South Maryland Avenue
Chicago, IL 60637

Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

POSTDOCTORAL POSITION is available for a Ph.D.-level chemist or chemical engineer with a strong background in catalysis and/or electrochemistry. The position is funded for 18 months by an EEC program on solid electrolyte fuel cells. The program involves the active collaboration of seven European institutes and industrial laboratories and aims at the fabrication and testing of novel monolithic solid oxide fuel cell reactors.

Send résumé and a short summary of research experience to: **Professor C. G. Vayenas, Institute of Chemical Engineering, P.O. Box 1239, University of Patras, GR 26110, Patras, Greece.**

POSTDOCTORAL POSITION available immediately for 1 to 2 years for natural products research. Candidate must have Ph.D. in this field, with 2 to 3 years of postdoctoral experience, and proven record of producing quality publications. Send résumé, summary of research experience, and three references whom you will request to write to me directly: **Dr. K. V. Rao, Chairman, Medicinal Chemistry, Box 1485, JHMC, Gainesville, FL 32610**. Deadline for receipt of applications is 31 August 1987.

POSTDOCTORAL

POSTDOCTORAL POSITION to study lipid protein interactions, transfer of lipids between membranes and proteins, and enzymatic processes using NMR spectroscopy of different nuclei and 2D-NMR methods. Ph.D. in biophysics, biochemistry, chemistry, or related field required. Please send curriculum vitae and three letters of recommendation to: **Dr. James A. Hamilton, Biophysics Institute, Boston University School of Medicine, 80 East Concord Street, Boston, MA 02118**. *Boston University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL

POSTDOCTORAL POSITION available immediately to study pathogenesis of AIDS. Work includes the effect of HIV infection on lymphocyte and macrophage function. Requires background in cellular immunology and/or virology. Send curriculum vitae and names of three references to: **Dr. Elinor Levy, Department of Microbiology, Boston University School of Medicine, 80 East Concord Street, Boston, MA 02118**. *Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION available to study molecular mechanisms underlying hormone signal transduction via receptors linked to phospholipid metabolism. Research will include studies on receptor-G-protein interactions, regulation of receptor function, and purification of receptor-effector components. Experience in hormone receptor biochemistry desirable. Send curriculum vitae and names of three references to: **Dr. L. M. Fredrik Leeb-Lundberg, Department of Biochemistry, The University of Texas Health Science Center, 7703 Floyd Curl Drive, San Antonio, TX 78284**.

An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study DNA repair in eukaryotes at the molecular level. Topics include (i) repair in yeast plasmids and inducible genes, (ii) DNA lesion mapping in chromatin and (iii) isolation of repair complexes using biotinylated nucleotides. Experience in molecular biology and/or electron microscopy preferred. Send curriculum vitae and three letters of recommendation to: **Dr. Michael J. Smerdon, Biochemistry/Biophysics Program, Washington State University (WSU), Pullman, WA 99164-4660**.

WSU is an Equal Opportunity/Affirmative Action Employer.

DOUGLAS HOSPITAL RESEARCH CENTRE MCGILL UNIVERSITY POSTDOCTORAL POSITION

Immediate opening and for up to 3 years, to study neuropeptide Y, CGRP, and VIP receptors in brain and peripheral tissues using binding assays, autoradiography, bioassays, and second messenger coupling systems. Ph.D. in pharmacology, physiology, or biochemistry is required. Expertise in methods mentioned above is necessary. Send curriculum vitae with a letter outlining research goals and three letters of reference to:

Dr. Rémi Quirion
Director, Research Laboratories
Douglas Hospital Research Centre
6875 LaSalle Boulevard
Verdun, Québec, Canada H4H 1R3

NATIONAL CANCER INSTITUTE
National Institutes of Health, Public Health Service
CANCER PREVENTION FELLOWSHIP PROGRAM, CPFP

The DIVISION OF CANCER PREVENTION AND CONTROL is accepting applications for CPFP. The primary purpose of this program is to attract individuals from a multiplicity of health science disciplines into the field of cancer prevention and control research. The program provides for: participation in DCPC Cancer Control Academic Program (a formal four-month course in cancer prevention and control); 20 months at NCI working directly with individual preceptors on ongoing cancer prevention and control projects and the NCI Year 2000 Goals; one year at a DCPC-approved cancer control program or State Health Department (may be optional). Funding permitting, up to 10 Fellows will be accepted for up to three years of training, beginning on August 28, 1988.

APPLICANTS MUST (BY THE DEADLINE): (1) Possess an M.D. or D.O. degree from an accredited medical school in the U.S., Puerto Rico, or Canada. (Foreign medical graduates—American citizens or Resident Aliens who have received their medical degree from a medical school outside the U.S., Puerto Rico and Canada and that is listed in the World Health Organization's *World Directory of Medical Schools*—must be certified by the Educational Commission for Foreign Medical Graduates [ECFMG]. Current certification, ECFMG or Foreign Medical Graduate Examination in the Medical Sciences [FMGEMS], is required for all foreign medical graduates.) Must have satisfactorily completed an internship (PG1) approved by the Council on Medical Education. (However, application will be accepted when internship is an integral part of medical school curriculum or incorporated as part of residency training.) —OR— Possess other accredited U.S., Puerto Rican, or Canadian doctoral degree (Ph.D., Dr. P.H., D.D.S., etc.) in a discipline related to cancer prevention and control research; biomedical, medical, nutritional, public health or behavioral sciences. (Foreign doctoral graduates must provide documented evidence that the foreign education is comparable to doctoral education received in accredited institutions noted above.); (2) Possess U.S. citizenship or be a resident alien eligible for citizenship within four years; (3) Complete and return the application packet by the deadline (including arranging for official academic transcripts and four, current, original letters of reference to be sent directly by the academic institutions and referees to the CPFP Coordinator).

For questions concerning the program's scientific or administrative aspects, please call Dr. David Poskanzer or Ms. Nancy Garner, respectively. Application packets may be obtained by sending a *POSTCARD* with your name and home address to **CPFP Coordinator, NIH/NCI/DCPC/CCAB, Blair Building, Room 4A05, 9000 Rockville Pike, Bethesda, MD 20892-4200**, or call (301) 427-8788. Please do not send any material until after you have read the instructions in the application packet.

DEADLINE FOR RECEIPT OF APPLICATIONS: JANUARY 15, 1988
(The NIH is an Equal Opportunity Employer)

**RESEARCH OPPORTUNITIES
 IN
 PLANT BIOTECHNOLOGY**

The GARST SEED COMPANY, a member of ICI's International Seeds Business, is seeking Plant Scientists to work on regenerable cell culture systems in crop plants. Applicants should have a Ph.D. and preferably several years' relevant postdoctoral experience. A background in plant genetics and the ability to communicate effectively with plant breeders are desirable assets.

The successful applicants will participate in a project team with membership both in Slater, Iowa (Garst Seed Company) and in Jealott's Hill, U.K. (ICI). The ability to work productively as a member of this team is essential.

Also available are positions at the BS/MS level. Applicants should have training and experience in plant tissue culture.

All positions are in the Garst Seed Company's research facility at Slater, Iowa (10 miles south of Ames). Salary and benefits will be competitive.

Send Resume to:
Bioscience Section Secretary
Garst Seed Company
P.O. Box 500
Slater, Iowa 50244



The Garst Seed Company is an Equal Opportunity Employer

ASSOCIATE PROFESSOR, ASSISTANT PROFESSOR AND POSTDOCTORAL POSITIONS

Department of Microbiology, Mount Sinai School of Medicine

Several tenure-track faculty positions at junior and senior levels are open in the Department of Microbiology. Applicants with strong molecular and genetic backgrounds who are interested in viral and cellular gene expression in animal cells are invited to apply. In particular, individuals with independent research achievements in DNA and RNA tumor viruses and oncogenes are encouraged. These efforts are in coordination with current major recruitments in the newly created Centers for Molecular Biology, Neurobiology and Immunobiology at the Mount Sinai School of Medicine.

Postdoctoral/research associate positions are also available in the laboratories of the following faculty members in the Department.

Constantin Bona: Regulation of idiotype-determined immune response; molecular basis for the diversity of antibody response to foreign and autoantigens; preparation of idiotype vaccines.

Selina Chen-Kiang: *In vitro* RNA transcription and processing; molecular mechanism of regulation of transforming genes in human lymphoid cells.

Ming-Ta Hsu: DNA topology and gene expression; DNA tumor virology; electron microscopy of nucleic acids and nucleoprotein complexes.

Edwin D. Kilbourne: Influenza virus vaccine and immune response; genetic determination of viral virulence.

Mark Krystal: Viral replication; structure-function relationships of viral proteins through expression and mutagenesis.

Peter Palese: Genetics of animal viruses; mechanism of replication of influenza viruses; development of antivirals; molecular epidemiology of viruses.

Beatriz Pogo: Mechanisms of replication of expression of cytotoxic and oncogenic viruses.

Frances Smith: Characterization of mutations in RNA and DNA molecules responsible for genetic disease.

Jerome L. Schulman: Virulence factors in influenza viruses; virus-determined differences in the pathogenesis of influenza virus infections.

James G. Wetmur: Physical biochemistry; nucleic acid hybridization; antisense nucleic acids; transcriptional regulation of genes in the human heme biosynthesis pathway.

Applicants for the faculty positions should send a curriculum vitae, three or more letters of reference and a one page research summary to: Dr. Peter Palese, Department of Microbiology, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029. Applications for the postdoctoral positions should be addressed to individual faculty members at the same address. We are an equal opportunity/affirmative action employer.

MOUNT SINAI

K U W A I T

UNIVERSITY OF KUWAIT

HEALTH SCIENCE CENTRE

FACULTY OF MEDICINE

Medical Science and Clinical Appointments

Applications are invited for the following appointments in the Faculty of Medicine:

BIOCHEMISTRY:

a. Associate Professor		1 post
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COMMUNITY MEDICINE:

a. Professor/Associate/Assistant	Medical Demography	1 post
b. Professor/Associate/Assistant	Epidemiology (Health Service)	1 post
c. Professor/Associate/Assistant	Epidemiology (Infectious Diseases)	1 post
d. Professor/Associate/Assistant	Epidemiology (Chronic Diseases)	1 post

MICROBIOLOGY:

a. Professor	Clinical Microbiology	1 post
b. Professor/Associate Professor	Clinical Virology	1 post
c. Professor/Associate Professor	Clinical Immunology	1 post
d. Associate Professor/Assistant Professor	Microbial Chemistry	1 post

PATHOLOGY:

a. Professor/Associate Professor	Histopathology/Cytology	1 post
b. Professor/Associate Professor	Histopathology	1 post

PHARMACOLOGY:

a. Professor/Associate Professor	Toxicology	1 post
b. Assistant Professor	Cardiovascular/Pharmacology	1 post

PHYSIOLOGY:

a. Professor/Associate Professor		1 post
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MEDICINE:

a. Associate/Assistant Professor	Infectious Diseases	1 post
b. Associate/Assistant Professor	Clinical Haematology	1 post
c. Associate/Assistant Professor	Clinical Immunology	1 post

NUCLEAR MEDICINE:

a. Associate/Assistant Professor	Clinical Nuclear Medicine Physician	1 post
b. Assistant Professor	Nuclear Medicine Physicist	1 post

GYNAECOLOGY and OBSTETRICS:

a. Professor	Modern Obstetrics & Obstetrical Perinatology	1 post
b. Associate Professor	Endocrinology & Andrology	1 post

ORGAN TRANSPLANTATION:

a. Associate/Assistant Professor	Bone Marrow Transplantation	1 post
b. Associate/Assistant Professor	Transplant Intensive Care	1 post

PAEDIATRICS:

a. Professor/Associate Professor	Paediatric Haematologist	1 post
b. Professor/Associate Professor	Paediatric Oncologist	1 post
c. Associate/Assistant Professor	Paediatric Endocrinologist	1 post
d. Associate/Assistant Professor	Paediatric Immunology	1 post

PSYCHIATRY:

a. Associate/Assistant Professor	Psychiatry	1 post
b. Associate Professor	Psychiatry	1 post

RADIOLOGY:

a. Professor and Chairman		1 post
b. Associate/Assistant Professor	Orthopedic Radiology	1 post
c. Associate/Assistant Professor	Uroradiology	1 post
d. Associate/Assistant Professor	Angiography/Interventional Radiology, Ultrasound & CT.	1 post

SURGERY:

a. Associate Professor	Anaesthesiology	1 post
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PRIMARY CARE:

a. Associate/Assistant Professor	Family Medicine	1 post
b. Associate/Assistant Professor	General Practice	1 post

REQUIREMENTS FOR APPOINTMENT:

Applicants should possess a Ph.D. or higher professional qualification, i.e. F.R.C.S., M.R.C.P., etc., in their respective speciality and have conducted and published research in their field. Professor should have 14 years' experience, 4 as an Associate Professor. Associate Professor should have 9 years' experience, 4 as an Assistant Professor.

CONDITIONS OF APPOINTMENT:

Salaries: Total monthly salaries will be within the following scales according to qualifications and experience (1 KD = S£2.3, US\$3.5 approximately).

– Professors with clinical appointments	= KD.1210-1370	(8 increments)
– Professors medically qualified with medical science appointments	= KD.1140-1300	(8 increments)
– Professors non-medically qualified	= KD.1070-1230	(8 increments)
– Associate Professors with clinical appointments	= KD. 989-1149	(8 increments)
– Associate Professors medically qualified with medical science appointments	= KD. 932-1092	(8 increments)
– Associate Professors non-medically qualified	= KD. 875-1035	(8 increments)
– Assistant Professors with clinical appointments	= KD. 768- 928	(8 increments)
– Assistant Professors medically qualified with medical science appointments	= KD. 724- 884	(8 increments)
– Assistant Professors non medically qualified	= KD. 680- 840	(8 increments)

Social allowance: In addition to the above salary, social allowance is paid in accordance with the rules and regulations of the University.

Clinical supplements: In addition to the above University salaries there will be monthly clinical supplement paid by the Ministry of Public Health for 10 months a year to medical school staff with clinical service commitments. These are:

Professor and Chairman	: KD. 450.
Professor	: KD. 400.
Associate Professor	: KD. 300.
Assistant Professor	: KD. 200.

Conference: A member is entitled to attend one academic conference a year which would be subjected to the University rules and regulations.

Gratuity: There is a gratuity of one month basic salary for each year employed payable on termination of contract.

Housing: Suitable furnished, air-conditioned accommodation, electricity and water free of charge.

Medical Care: Free, comprehensive treatment is available in Kuwait under the State Health Service.

Travel: Air tickets are provided from the country of recruitment for the appointee, spouse and up to 3 dependent children under 20 years. Thereafter, return air tickets are issued annually to the country of citizenship or permanent residence. On termination of contract, air tickets are provided to the country of recruitment. A baggage and freight allowance is also provided.

Vacation: 60 days paid annual leave and various national holidays.

Education: This is provided free in State Schools where the instruction is in Arabic. Staff who have to send their children to non-Arabic schools in Kuwait will have tuition fees of up to a maximum of 3 children met by the University.

Taxation: There is no income tax in Kuwait. Currency is transferable without restriction.

METHOD OF APPLICATION:

Curriculum vitae in duplicate which should include the names of 3 referees, personal particulars, qualifications with dates, career history, teaching experience, research accomplishments and where appropriate clinical experience should be sent to the **DIRECTOR OF PLANNING AND ACADEMIC STAFF RECRUITMENT, FACULTY OF MEDICINE, UNIVERSITY OF KUWAIT, HEALTH SCIENCE CENTRE, P.O. BOX NO. 24923 SAFAT, 13110 – SAFAT – KUWAIT**, to arrive NO LATER THAN 31ST OCTOBER 1987.

THE CARLSBERG LABORATORY COPENHAGEN, DENMARK

Head of the Department of Chemistry

Applications are invited for the post of head of the Department of Chemistry. The holder of the post must have qualifications equivalent to a University Professor and will have the title of Professor. Candidates should have a substantial record of scientific research—most likely but not necessarily within protein chemistry—as well as proven capability in stimulating and directing a research department.

The candidate is expected to continue the traditions of the Carlsberg Laboratory with its combination of basic and applied research. The applied research is to be carried out in collaboration with other departments of the Carlsberg Research Center, as well as with companies within the United Breweries Group. Besides brewing and fermentation, the Group is engaged in a number of scientifically based activities such as enzyme and peptide manufacturing.

The Head of Department is responsible to the Board of Trustees of the Carlsberg Laboratory and informal enquiries can be made to the Board in writing or by telephone (+451351788, ext. 2402) to the Chairman:

Professor Ebba Lund
Department of Veterinary Virology and Immunology
The Royal Veterinary and Agricultural University of Copenhagen
13 Bülowssvej
DK-1870 Frederiksberg C
Denmark

Applications are to be forwarded to the Board of Trustees on the same address before September 15, 1987.

ELECTRONICS TECHNICIAN/ ENGINEER (BS/MS Degree)

We seek an Electronics Technician/Engineer with a BS, plus 2 yrs. exp., or an MS in Electronics, preferably with exp. in the field of NMR (Nuclear Magnetic Resonance) or MRI (Magnetic Resonance Imaging). The position requires trouble-shooting and improving NMR spectrometers, including high resolution and *in vivo* NMR systems. The position will include interaction with the users of the new NIH, NMR Center and involvement in the design and development of probes and coils for spectroscopy and imaging. Exp. with rf electronics, computer hardware and software preferred. Salary range depends on qualifications and experience. Position location is Bldg. 10, National Institutes of Health, Bethesda, MD.

For further information contact: **Dr. Jack S. Cohen, Clinical Pharmacology Branch, Division of Cancer Treatment, National Cancer Institute, National Institutes of Health, 9000 Rockville Pike, Bldg. 10, Rm. 6N105, Bethesda, MD 20892. Telephone: (301) 496-3390.** An Equal Opportunity Employer.

Clinical Safety Coordination

Outstanding opportunities exist within the Clinical Safety Coordination Department of Smith Kline & French Laboratories as a result of increasing development activity.

Assistant Manager/Clinical Safety — Process and supervise processing of clinical trials safety data; provide scientific support for relating preclinical findings to the safety profile of agents in clinical research; provide datafile searches in support of the evaluation of the emerging safety profile of compounds in clinical research and for preparation of safety sections of study summaries, registration documents, etc.; conduct literature searches and maintain updated file of literature relating to safety of compounds in clinical research.

Assistant Manager/Safety Analysis & Clinical Data Assurance — Prepare analyses of safety data for clinical trials conducted worldwide and safety summaries for inclusion in dossiers for worldwide regulatory submissions. Conduct audits of clinical trial data.

The successful candidates must have:

- Ph.D. or equivalent in the Biomedical Sciences with a minimum of 1 year experience in clinical research.
- Experience with computer representation of clinical trial data.
- Ability to utilize computer software to set up files, store recall, and selectively display study data, desirable.

Smith Kline & French Laboratories is located near Valley Forge, PA in a new, state-of-the-art research complex. We offer an excellent compensation and benefits package as well as opportunities for personal and professional growth. Interested candidates should send resume to George P. Kissell, Jr., Manager, Personnel Relations, G0097, SK&F Laboratories, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an equal opportunity employer, M/F/H/V. NO PHONE CALLS PLEASE.

SK&F
A SmithKline Beckman Company

SAN DIEGO SUPERCOMPUTER CENTER

GA TECHNOLOGIES, INC., a high technology research company, operates a Supercomputer Center for the National Science Foundation, serving researchers at over 100 U.S. institutions. Located at the University of California, San Diego, it features a Cray X-MP/48 Supercomputer and an SCS-40 Mini Supercomputer with interactive access via high speed nationwide networks.

Openings exist in our User Services Department for Ph.D.-level scientists in computational chemistry, molecular biology, or biophysics. User Services is responsible for selecting, converting and supporting applications software, preparing on-line documentation, and providing training. Individual and collaborative research on a part-time basis is strongly encouraged.

Applicants require extensive experience in FORTRAN, on CRAY and/or DEC computers and a working knowledge of the COS, CTSS and/or VMS operating systems. Familiarity with UNIX, C, mathematical libraries, and graphics is also desirable.

The San Diego Supercomputer Center offers professional advancement along with a comprehensive salary and benefits plan. Candidates should send their resume to: **GA TECHNOLOGIES INC., Department SDSC, P.O. Box 85608, San Diego, CA 92138.** SDSC is an equal opportunity employer m/f/h/v.



We Said NO. So You Could Say YES!

IGEN, Inc. turned down a major pharmaceutical firm's offer to purchase us because we believe IGEN can become one of the major biotechnology firms dedicated to the development of proprietary diagnostics systems and pharmaceuticals.

To fulfill its promise, IGEN is undergoing a major expansion in many of its key research and development areas. Currently the company is focusing on immuno and nucleic acid-based diagnostics, catalytic antibodies, biosensor research and antiviral chemotherapy. In order to complete the assembly of specialized teams of outstanding scientists for development of these projects, we are seeking candidates at all degree levels with experience in one or more of the following disciplines.

Chemistry

Specialty areas include organic and/or inorganic synthesis, spectroscopy, nucleic acids and peptide synthesis and purification, protein chemistry and purification and natural products synthesis. Dept. CH

Clinical Systems Development

Expertise in analytical chemistry, instrumental methods including electrochemistry, computer programming and software development, and mechanical engineering. Experience in clinical diagnostics and associated instrumentation a plus. Dept. CSD

Assay Design and Development

Positions require a background in modifying proteins, peptides and nucleic acids for developing diagnostic assay systems, experience with some of the currently available assay formats and non-isotopic detection systems. Dept. AD

Biological Chemists

Seeking applicants for our catalytic antibody program with experience in elucidating enzymatic reactions and antibody binding mechanisms by chemical, kinetic and spectroscopic techniques. Dept. BC

Molecular Biology

Requires individuals experienced with sequencing, mutagenesis, cDNA and genomic cloning. The project involves the modification of antibody genes. Experience in the area of immunology would be an advantage. Dept. MB

Biosensors Research

Candidates are sought having multidisciplinary backgrounds with experience in areas such as electrochemistry, optics, electrical engineering, microfabrication, immunodiagnostics, protein immobilization, and/or organic thin film (Langmuir-Blodgett) technologies. Dept. BR

If you are a qualified candidate, ready to join a rapidly growing biotechnology firm, while earning a salary commensurate with your experience and coverage under an attractive benefits package, you should give serious consideration to these positions.

Send your resume (with salary history) in confidence to: **Personnel Department, 1530 East Jefferson Street, Rockville, MD 20852. Please indicate the department code of the position you are interested in.**

IGEN, INC.

An Equal Opportunity Employer

***An Emerging Leader
in Biotechnology***

POSITIONS OPEN

POSTDOCTORAL POSITIONS— AQUATIC ECOLOGY

Available 15 August 1987, to assist faculty in research on large reservoir ecosystems and to teach introductory biology, botany, microbiology, or zoology. Experience in conducting field studies of carbon flow or population dynamics in freshwater ecosystems necessary. Appointments are for 12 months and may be renewable for one or two additional years. Please send letter of application and curriculum vitae with names and addresses of at least three references to: **Dr. J. M. King, Chair, Department of Biological Sciences, Murray State University, Murray, KY 42071.**

POSTDOCTORAL POSITION IN MICROBIOLOGY/BIOCHEMISTRY available immediately to study bacterial degradation of organic pollutants found in groundwater. Emphasis is on development and study of strains able to degrade substituted aromatic compounds. Background in microbial physiology, molecular biology, or strain construction helpful. Position is at Tyndall Air Force Base in Panama City, Florida. Annual stipend range is \$30,800 to \$34,500. Doctoral degree received within 3 years of starting date required as is U.S. citizenship or PRA status. Contact: **Postgraduate Research/Tyndall, University Programs Division, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831-0117. Telephone: 615-576-3190.**

POSTDOCTORAL POSITIONS IN OCULAR PRODRUG AND PEPTIDE ABSORPTION/METABOLISM UNIVERSITY OF SOUTHERN CALIFORNIA

Recent Ph.D.'s with experience in enzyme purification, characterization, and kinetics, peptide chemistry, or receptor pharmacology are sought. Experience in HPLC and animal handling is essential. Submit curriculum vitae, and names of three references by 15 September 1987 to: **Vincent Lee, Ph.D., School of Pharmacy, 1985 Zonal Avenue, Los Angeles, CA 90033-1086. Equal Opportunity Employer M/F/H.**

POSTDOCTORAL POSITION. Funding available for up to 5 years, to study protein-DNA interactions involved in activation and control of ribosomal RNA transcription in *E. coli*. Genetics and/or biochemistry background preferred. Send curriculum vitae including names, addresses, and phone numbers of two references to: **Dr. Richard Gourse, Department of Genetics, University of Georgia, Athens, GA 30602 or telephone: 404-542-8000.**

POSTDOCTORAL POSITION—THIAMIN DIPHOSPHATE DEPENDENT ENZYMES: available immediately at \$20,000 per annum to study novel enzyme-bound intermediates by a variety of techniques. Experience in enzyme purification and kinetics required, in stopped-flow and NMR spectroscopy desirable. Send résumé, names of three references to: **Dr. Frank Jordan, Department of Chemistry, Rutgers University, Newark, NJ 07102. Rutgers is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL RESEARCH POSITION ELECTRON MICROSCOPY

Available immediately to candidates with skills in cell biology/electron microscopy of red cell skeletal protein biogenesis and molecular defects of membrane skeletons in abnormal red cells. Successful applicants will join an active team consisting of seven M.D.'s and Ph.D.'s in a recently funded NIH Program Project. All interested candidates should forward résumés to: **Jiri Palek, M.D., Department of Biomedical Research, St. Elizabeth's Hospital of Boston, Tufts University of Medicine, 736 Cambridge Street, Boston, MA 02135. Equal Opportunity Employer.**

POSTDOCTORAL RESEARCH POSITION MEMBRANE PROTEIN SYNTHESIS

A research position is available for a Ph.D. or M.D. candidate to join the team which is actively working on mammalian skeleton protein synthesis and its defects in hereditary anemias. Candidates should have a background in protein chemistry and in cell culture techniques. All interested candidates should forward résumés to: **Jiri Palek, M.D., Department of Biomedical Research, St. Elizabeth's Hospital of Boston, Tufts University of Medicine, 736 Cambridge Street, Boston, MA 02135. Equal Opportunity Employer.**

POSITIONS OPEN

TWO POSTDOCTORAL POSITIONS at University of Hawaii. (1) A study of ionic channels, biosynthetic regulation and secretion in organ- and cell-cultured peptidergic neurons exploiting the unique advantages of crab eyestalk neurosecretory system. Skill in one of the following is sought: patch clamping, peptide biochemistry, or cloning. **Ian Cooke, P.I.** (2) A study of the kinetics and regulation of peptide processing in neurosecretory systems (rat, *Aplysia*, and crab), utilizing quantitative peptide isolation and analysis techniques and computer modeling. **Robert Newcomb, P.I.** For both: a 2-year commitment is required, with a third year possible, to start 1 October 1987, or after. Send a résumé and names of three references to: **Békésy Laboratory of Neurobiology, 1993 East-West Road, Honolulu, HI 96822. Telephone: 808-948-6776. Equal Employment Opportunity/Affirmative Action Employer.**

POSTDOCTORAL RESEARCH ASSOCIATES

Two positions are available to study the biochemistry, regulation and pathology of red blood cell membranes and membrane-skeletal proteins. Applicants with experience in protein biochemistry, biological membranes, protein kinases, and phosphatases are encouraged to apply. Opportunity to join an established group in a well-equipped and active department. One position will be available October 1987 and the other January 1988. A highly competitive salary appropriate to experience will be offered. Send curriculum vitae and names of three references to: **Carl M. Cohen, Ph.D., Chief, Division of Cellular and Molecular Biology, St. Elizabeth's Hospital, 736 Cambridge Street, Boston, MA 02135. Equal Opportunity Employer.**

POSTDOCTORAL OR RESEARCH ASSOCIATE POSITION IN PRIMATE REPRODUCTIVE ENDOCRINOLOGY

Available immediately to Ph.D. to study peptide and steroid hormone production in vivo and at the cellular/subcellular/molecular level by fetoplacental unit during baboon pregnancy. Experience with primates is not necessary. Background in reproductive endocrinology and U.S. citizenship essential. Send curriculum vitae to:

**Eugene D. Albrecht, Ph.D.
Department of Obstetrics and Gynecology
University of Maryland School of Medicine
655 West Baltimore Street
Baltimore, MD 21201**

POSTDOCTORAL OR RESEARCH ASSOCIATE POSITION

Position available September/October 1987, to study the coupling of neuronal muscarinic receptors to effector mechanisms, in addition to regulation of the sensitivity of these receptors. The proposed studies include radioligand binding, tissue culture, in addition to assays of cyclic nucleotide levels and phosphoinositide hydrolysis. Appointment level will be commensurate with experience. Send résumé and three letters of reference 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 RESEARCH ASSOCIATES

Positions for NCI postdoctoral training program in molecular and cellular mechanisms of carcinogenesis are available at The University of Texas System Cancer Center—Science Park. Research programs focus on the following areas: somatic cell genetics, DNA repair and mutagenesis, carcinogen metabolism and adduct formation, tumor promotion, mechanisms of lymphomagenesis, normal and tumor cell differentiation, biochemical genetics, and growth factors. Current approaches in whole animal and in vitro culture systems include: flow cytometry (BD FACS 440), HPLC, monoclonal antibody production, Southern blot analysis and DNA sequencing, isoenzyme analyses and electron microscopy. Applicants must be U.S. citizens or permanent residents and have a Ph.D., M.D., or D.V.M. degree. For application forms contact: **Dr. Thomas J. Slaga, Director, UTSCC, Science Park—Research Division, P.O. Box 389, Smithville, TX 78957. Telephone: 512-237-2403. An Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE— Position available for an electrophysiologist to characterize the properties of central axons which have regenerated along peripheral nerve implants. Preference given to applicants experienced in spinal cord physiology and/or tract-tracing, and histological techniques. Please send curriculum vitae with names of three references to: **Dr. Julia K. Terzis, Microsurgical Research Center, Eastern Virginia Medical School, 700 Olney Road, Norfolk, VA 23507.**

POSTDOCTORAL RESEARCH ASSOCIATE positions are available to study the induction of cytochrome P-450 isozymes by alcohol and pyrazole; the generation of active oxygen radicals by cells and subcellular organelles and their role in alcohol toxicity; the regulation of alcohol metabolism and its metabolic actions in cell culture systems. Salary commensurate with experience. Appointment for 2 or 3 years. Please send résumé, brief description of research experience and letters of recommendation to: **Dr. Arthur I. Cederbaum, Department of Biochemistry, Box 1020, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029. An Equal Opportunity Employer.**

PROTEIN BIOCHEMIST

Applications are invited from protein chemists for the position of assistant professor, tenure-track, with a joint appointment in the Division of Geographic Medicine, Department of Medicine, and a department in the basic sciences at Case Western Reserve University. The candidate should hold an M.D. or Ph.D., and must have had postdoctoral experience. The applicant will be expected to develop an independent academic career in structural, biochemical, and immunologic characterization of antigens relevant to tropical diseases including infection caused by *Schistosoma mansoni*, *Brugia malayi*, *Onchocerca volvulus*, and *Entamoeba histolytica*, which complements existing strengths in molecular parasitology. Send curriculum vitae, statement of career objectives, and letters of reference to: **Karin Knutsen, Division Coordinator, Division of Geographic Medicine, Department of Medicine, University Hospitals of Cleveland, 2074 Abington Road, Cleveland, OH 44106. Equal Opportunity Employer.**

PROTEIN BIOCHEMIST AND MOLECULAR BIOLOGIST. The Department of Biochemistry and Molecular Biology, Louisiana State University Medical Center in Shreveport, invites applications for two faculty positions at the associate or full professor level to share in the leadership of an expanding department. Outstanding candidates at the assistant professor level will also be considered. The successful applicants are expected to conduct a vigorous research program in the areas of protein biochemistry, molecular biology, or molecular genetics. Twelve-month salary support, generous start-up funds and modern well-equipped research facilities are available. Letters of application, including curriculum vitae, a statement of future research interests, as well as three letters of reference should be sent by 1 October 1987 to: **Dr. Richard J. Courtney, Chairman, Department of Biochemistry and Molecular Biology, L.S.U. Medical Center, 1501 Kings Highway, Shreveport, LA 71130. An Affirmative Action/Equal Opportunity Employer.**

PROTEIN CHEMIST

A position is available for a skilled protein-peptide chemist to oversee an instrumentation facility which incorporates peptide sequencing and synthesis. The successful applicant will interact with a small group of investigators working on the structure and function of proteins and peptides involved in chemical transmission in the nervous system. This appointment will be a nonfaculty, career-level appointment. In addition to participating in the purification of peptides, this individual will be the principal operator of a gas-phase sequencer and automated synthesizer. Demonstrated experience in peptide chemistry, and familiarity with the required equipment and techniques are highly preferred. Direct applications, including a description of relevant experience and the names of three references to: **Dr. Jonathan B. Cohen, Department of Anatomy and Neurobiology, Washington University School of Medicine, 660 South Euclid Avenue, St. Louis, MO 63110. An Equal Opportunity/Affirmative Action Employer.**

STUDY DIRECTOR

Mammalian Toxicology

The Corporate Toxicology Facility of Mobay Corporation, located in Kansas City, is currently searching for a qualified Ph.D. professional to handle the following responsibilities.

- Planning and directing all subchronic and chronic toxicity studies
- Scientific interpretation and analysis of study results and technical report preparation
- Future planning and development in the area of mammalian chronic/oncogenicity studies

Qualified candidates should possess Ph.D. and several years experience as a study director dealing with chronic/oncogenicity studies.

Position offers a competitive salary and comprehensive paid benefits package including complete relocation. Send curriculum vitae and salary history to: **C.D. Eastburn, P.O. Box 4913, Kansas City, Mo. 64120.**



**Mobay
Corporation**

PENNSYLVANIA STATE UNIVERSITY

FACULTY POSITIONS

Molecular Evolutionary Genetics

The Department of Biology, Pennsylvania State University, seeks to fill two tenure-track positions in evolutionary genetics, at the assistant or associate professor level. Research areas of interest are the population genetics of molecular variation, the evolution of genes and genetic systems, and the application of molecular techniques to the study of breeding systems, gene flow, recombination, and other factors affecting the genetic structure and evolution of populations. Significant research accomplishments and evidence of outstanding potential to develop a strong, independent research program will be key considerations. Applicants should have postdoctoral training.

Send *curriculum vitae*, statement of research interests, and three letters of reference to **Dr. Robert K. Selander, Department of Biology, Pennsylvania State University, University Park, PA 16802.** Closing date for applications is September 30, 1987.

An Equal Opportunity/Affirmative Action Employer.

ASSOCIATE EDITOR SCIENCE MAGAZINE

Editorial position available for a Ph.D. inorganic chemist, physical chemist, or solid-state physicist with two or three years of research experience; wide general interest in science and instrumentation; and publications in the refereed literature. The successful candidate's initial duties will include editing manuscripts for clarity and style. Progress to wide responsibilities in manuscript selection is expected. Previous editorial experience not required. This is a full-time position in our Washington editorial office. Please submit résumé with cover letter, including salary requirements, to:

**Carolyn Bell
SCIENCE Magazine
1333 H Street, NW
Washington, D.C. 20005**

Equal Opportunity Employer

Regional Medical Associate

Pharmaceutical Marketing

Currently we have an opening in the Mid-Atlantic Region for a Regional Medical Associate to combine both scientific expertise and marketing skills. The selected candidate will report directly to the Regional Vice President and will be headquartered in Philadelphia, PA. Responsibilities are to establish effective relationships within key medical institutions, providing scientific liaison and in-depth information essential to appropriate use of SK&F's products. Will also have training responsibility at the Representative, Medical Staff and Pharmacy levels. 25% travel.

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

In addition to an independent work environment where personal and professional growth are a way of life, we offer an outstanding compensation/benefits package geared to today's market. Please send resume and current earnings to:

Box 121
SCIENCE

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Equal Opportunity
Employer,
M/F/H/V

SK&F
A SmithKline Beckman Company

Head of the NERC Isotope Geology Centre

Salary up to £25,335 p.a.

The Natural Environment Research Council wishes to appoint a Head of its new Isotope Geology Centre, to be located at Keyworth, near Nottingham.

The Isotope Geology Centre is to provide a collaborative research service in all aspects of isotope geochemistry to the earth sciences community which includes universities/polytechnics and NERC institutes. Initially it is envisaged that the Centre will provide a research service utilising K/Ar; U/Pb; Rb/Sr and Sm/Nd techniques, as well as encompassing a range of stable isotopes (C, H, O and S).

It is expected that there will be a growing demand for these services, especially those involving stable isotopes, and the application of these techniques to the study of environmental problems may well include the life sciences as well as the earth sciences. The opportunity exists for the development of in-house research in addition to the Centre's principal role as a service.

The successful applicant is likely to be an experienced and innovative earth scientist with a substantial scientific reputation and proven management ability. Besides being responsible for directing the Centre's staff and other resources in providing the services approved by a programme management committee, the Head of the Centre will give scientific leadership to the community in the use of isotopes in geology and the introduction of novel techniques in isotope geochemistry.

The Centre is located at present in London, but will move to Keyworth, near Nottingham, in approximately two years' time when new accommodation will be available at the site of the British Geological Survey.

The post is offered at Grade 6 (salary scale £18,786 - £25,335).

The appointment is pensionable under the NERC Superannuation Scheme. Terms and conditions are similar to those in the British Civil Service.

Application forms may be obtained from Mr B Hall at the address given below or by telephoning (0793) 40101 ext 548. Completed applications, including a full CV should be sent to Mr B Hall, Natural Environment Research Council, Polaris House, North Star Avenue, Swindon, Wilts, England SN2 1EU not later than 31st August, 1987.

The Natural Environment Research Council is an Equal Opportunities Employer. All jobs in the UK are open to men and women of all ethnic groups and the Council also welcomes applications from disabled people.



Natural
Environment
Research
Council

KUWAIT

UNIVERSITY OF KUWAIT HEALTH SCIENCE CENTRE FACULTY OF MEDICINE

Applications are invited for the posts of **CHIEF TECHNICIAN** in the following departments. Candidates should have experience as a Clinical Laboratory technician and hold the F.I.M.L.S., or equivalent qualification, with fifteen years' experience including training. The successful candidate's duties will be of a multidiscipline nature and will be both in the laboratory and in the field.

Department of Medicine	: 1 post
Department of Pathology	: 1 post
Department of Pharmacology	: 1 post
Department of Anatomy	: 1 post
Department of Electronic Microscope Unit	: 1 post

Salary will be in the range KD. 450-512 per month (1 KD = 2.3 sterling pound, 3.5 US dollar approximately). There is no income tax in Kuwait and currency is transferable without restriction. Free, furnished, air-conditioned accommodation is provided, and electricity and water supplied free of charge. Sixty days paid annual leave for each completed year of employment, and annual economy class return air tickets to the country of citizenship or permanent residence are provided for the appointee, spouse and three dependent children. Free medical treatment is available under the State Health Service.

Applications should be submitted to: **THE DIRECTOR OF PLANNING AND ACADEMIC STAFF RECRUITMENT, FACULTY OF MEDICINE, UNIVERSITY OF KUWAIT, HEALTH SCIENCE CENTRE, P.O. BOX NO. 24923 SAFAT, 13110 SAFAT, KUWAIT**, with detailed curriculum vitae in duplicate, details of passport, and the names of three referees, to arrive **NO LATER THAN 31ST OCTOBER, 1987**.

BEHAVIORAL NEUROSCIENTIST

The Laboratory of Clinical Studies, National Institute on Alcohol Abuse and Alcoholism invites applications for a Fellowship position to study the effects of ethanol and other drugs on human psychomotor performance and cognition. Unique opportunity to become an active member of a multidisciplinary research team which integrates pharmacological, psychological, electrophysiological, and neuroradiologic approaches to the study of behavior. State-of-the-art equipment and experienced technical support available. Familiarity with Fortran and Macro (Digital) is desirable. The position is that of a Fellow with a salary range of \$17,000 to \$47,788 per annum commensurate with qualifications and is located on the National Institutes of Health campus in Bethesda, MD. Applications are invited from individuals having a Ph.D. in a neuroscience-related field. Interested candidates should submit their Curriculum Vitae and names of three references to: **Michael J. Eckardt, Ph.D., Chief, Section of Clinical Brain Research, LCS, NIAAA, Building 10, Rm. 3C-218, 9000 Rockville Pike, Bethesda, MD 20892**. Position is available now and is expected to be filled by September 15, 1987.

An Equal Opportunity Employer



Biosensor Breakthrough

Molecular Devices Corporation patented revolutionary silicon sensor technology last May. Our approach combines biochemistry with silicon science in unique and proprietary ways to dramatically advance measurement technology. Our analytical systems will provide to users sophisticated measurements with speed, sensitivity, and precision. We are interested in hearing from you if you have demonstrated hands-on experience in immunoassay research and development and expertise in the following:

Solid Phase Assay Chemist/ Chemical Engineer

In this position, you will use your assay development background to deal with chemistry issues associated with our membrane-based enzyme immunoassay products. You need a strong understanding of plastics, membranes, membrane chemistry and process development techniques as well as a PhD or equivalent and 5 years' experience. Familiarity with packaging and plastic fabrication techniques preferred. Some knowledge of medical diagnostic instrumentation helpful.

Immunoassay Development Chemist

You will develop immunoassays for our silicon-based sensors and be responsible for antibody screening and purification, conjugation to enzymes or other labels, and assay formulation and optimizations. Additional responsibilities include analysis of biological samples, interfering substances, reagent stability and studies of assay precision and accuracy. You must have a PhD or equivalent, a background in bringing research techniques through product development to production and 5 years' experience. Membrane or paper-based assay techniques desired. Familiarity with industry related products helpful.

Research Scientist

You will be responsible for understanding and optimizing flow properties on solid supports, as well as investigating alternative concepts and configurations for various immunoassay formats. You must have a strong understanding of fluid mechanics, plastics and membranes plus a PhD or equivalent in Chemical Engineering with 3 years' hands-on experience. Some knowledge of process development techniques and medical diagnostic instrumentation helpful.

To find out more, please send your resume, indicating position of interest, to Human Resources, Molecular Devices Corporation, 3180 Porter Drive, Palo Alto, CA 94304. An equal opportunity employer.



THE UNIVERSITY OF
PAPUA NEW GUINEA

Port Moresby

VACANCY

Applications are invited from suitably qualified persons for the following position:

PROFESSOR OF BASIC MEDICAL SCIENCES

M821001/87

Applicants should have a distinguished academic record and should possess a basic medical qualification and a Ph.D. or its equivalent in one of the following disciplines:

Anatomy
Physiology
Biochemistry
Pharmacology

Teaching and/or research experience in a developing country would be an advantage. The appointee will provide academic leadership, participate in undergraduate and postgraduate teaching in basic medical sciences and stimulate research and encourage the development of Papua New Guinea academic staff. The Professor may be elected to undertake additional administrative responsibilities. The Department of Basic Medical Sciences is responsible for undergraduate and postgraduate teaching in the above mentioned disciplines.

Teaching by extension and during the Lahara Session is an important part of the University's activities. The successful appointee should be prepared to take part in these or other outreach activities.

SALARY:

Professor K28,010 p a plus 24% gratuity

Applications will be treated as strictly confidential and should include three copies of a full curriculum vitae, a recent small photograph, the names and addresses of three referees and date of availability. In order to expedite the appointment procedure, applicants are advised to contact their referees to send confidential reports directly to the University without waiting to be contacted. Applications should be forwarded to the Deputy Registrar (Staffing), University of Papua New Guinea, P.O. Box 320, University Post Office, Papua New Guinea.

Applications close on 31st August, 1987.

F P DIALA
REGISTRAR

POSITIONS OPEN

PROFESSOR AND HEAD OF THE DEPARTMENT OF BIOCHEMISTRY AND NUTRITION

College of Agriculture and Life Sciences, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061. Candidates must have Ph.D. degree in biochemistry or appropriate related discipline. Position available 1 July 1988. Applications will be received until 15 October 1987, or until the position has been filled. Send letter of application, complete résumé, the names of three references, and a summary of professional goals to: **Dr. James R. Nichols, Dean, Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.**

PROJECT MANAGER—LATIN AMERICA. Project Manager for International Development Program will manage activities in several Latin American countries. Familiarity with environmental issues and broad understanding of U.S. environmental policy required, as are 5 years of experience in project administration, and ability to work effectively with governmental and nongovernmental agencies in advisory capacity. Knowledge of Spanish and preferably Portuguese essential, as is prior experience in Latin American countries. Forward résumé and cover letter by 31 August 1987 to: **Susannah Dryden, The Conservation Foundation, 1250 24th Street, N.W., Washington, DC 20037. Equal Opportunity Employer.**

PROJECT OFFICER—MEXICO PROGRAM. As member of Hispanic Latin America and Caribbean team based in Washington, DC, will develop and oversee expanding program in Mexico, as well as assist with developing plans and policies for projects in other countries. Master's degree and 2 years of experience in Latin America, including substantive work experience in Mexico required. Orientation toward natural resource conservation desired, as are excellent English and Spanish communications skills. Forward résumé and cover letter by 28 August 1987 to: **Susannah Dryden, World Wildlife Fund, 1250 24th Street, N.W., Washington, DC 20037. Equal Opportunity Employer.**



RESEARCH ASSISTANT RECOMBINANT DNA FACILITY FOR THE MOLECULAR BIOLOGY CENTER AT WAYNE STATE UNIVERSITY

Applications are invited for the position of research assistant to be manager of a recently developed facility at Wayne State University. Candidates should hold a Master's degree and have experience in molecular biology, particularly in construction and screening of genomic or cDNA libraries, Southern and Northern blotting, DNA sequencing and footprinting. In addition to management of the facility, responsibilities will include training students and development of new approaches and applications in the above areas. Salary commensurate with experience. Please submit (deadline: 15 September 1987) curriculum vitae and have three letters of recommendation sent to:

**Orlando J. Miller, M.D.
Director, Molecular Biology Center
Wayne State University
540 East Canfield
Room 3216 Scott Hall
Detroit, MI 48201**

Wayne State University is an Equal Opportunity/Affirmative Action Employer and actively seeks applications from women and minority groups.

RESEARCH ASSOCIATE position available now to study molecular mechanisms of peptide hormone action. Protein phosphorylation and transcriptional regulation will be compared in normal, diabetic, and aged rats. Approaches include Western blotting, Northern blotting with cDNA probes, and cell culture. Competitive salary. Send curriculum vitae and statement of research interests to: **Dr. H. J. Armbricht, Geriatric Center (111G-JB), VA Medical Center, St. Louis, MO 63125. Equal Opportunity Employer, M/F/V/H.**

POSITIONS OPEN

RESEARCH ASSISTANT position available for Ph.D. with bachelor's and doctorate degrees in pharmacy or a related science and 2 years of research experience. Research will involve experimental cancer chemotherapy, molecular biology, and biochemical pharmacology, both in vivo and in vitro. The applicant must be experienced in in vitro drug metabolism, receptor binding methodology, high performance liquid chromatography, two-dimensional gel electrophoresis, DNA and RNA hybridization and must be familiar with in vivo studies of antineoplastic agents in human tumor xenografts. Salary: \$24,000. Send curriculum vitae and names of three references to: **Jack Hiltzheim, Tennessee Job Service, 1295 Poplar Avenue, Memphis, TN 38104. Equal Opportunity/Affirmative Action Employer.**

RESEARCH ASSOCIATE

Design and conduct experiments on the purification, characterization, and molecular cloning of α_2 -adrenergic and ANF receptors and their genes. Experimental protocols include organic synthesis, high-performance liquid chromatography, Western blot electrophoresis, affinity chromatography, protein structure, and gene cloning. Experience in recombinant DNA is desirable but not essential. Must have a Ph.D. in chemistry or biochemistry with one or more years of postdoctoral experience. Forty hours per week, \$23,000 per year. Apply at:

**Tennessee Job Service
1295 Poplar
Memphis, TN 38104**

Attention: Mr. Jack Hiltzheim

THE WAKSMAN INSTITUTE RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY

RESEARCH ASSOCIATE to support the development of improved gene transfer systems in plants. Successful candidate will be responsible for developing new marker gene systems and core facility for several research groups interested in gene structure/function studies. Research interests include the control of gene action during either host-pathogen interactions or plant development. Experience in *Agrobacterium*/Ti plasmid mediated gene transfer systems preferred. Salary: \$23,785 to \$31,703, plus fringe benefits.

The Institute is rapidly expanding research facilities with a new 32,000 square foot research wing, greenhouse, walk-in growth rooms, and fieldspace that is part of a major Land-Grant University centrally located in the New York-Princeton-Philadelphia corridor. Institute programs of research and instruction operate in collaboration with allied interests in academic departments of the University, an adjacent medical school and a nearby college of agriculture and environmental sciences.

Please send an application with your curriculum vitae and the names of three references to: **Dr. Joachim Messing, Waksman Institute, Rutgers University, P.O. Box 759, Piscataway, NJ 08855-0759. Rutgers is an Affirmative Action/Equal Opportunity Employer.**

RESEARCH ASSOCIATE IN ENZYMOMOLOGY/MOLECULAR BIOLOGY

Applications are invited for a research position available from 1 September 1987 to conduct cloning and expression experiments for the production of several enzymes to be used in NMR and x-ray diffraction studies. A Ph.D. in biochemistry with 1 to 3 years of postdoctoral experience in the production and purification of enzymes using gene cloning techniques is required. Some experience with enzyme kinetics would also be advantageous. The salary is in the range \$25,000 to \$40,000 depending on age and experience. Application (together with the names of three referees) should be sent to: **Dr. A. I. Scott, Center for Biological NMR, Department of Chemistry, Texas A&M University, College Station, TX 77843. Texas A&M University is an Affirmative Action/Equal Opportunity Employer.**

RESEARCH ASSOCIATE, PATHOLOGY. Applications are invited for an experienced molecular biologist to work on a research project where messenger RNA for intermediate filament and calcium activated neutral proteinase are quantitated and localized in tissues by hybridization with cDNA probes. In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. Applicants should submit their curriculum vitae and the name of three references to: **Samuel W. French, M.D., Professor and Chairman, Department of Pathology, Faculty of Health Sciences, University of Ottawa, 451 Smyth Road, Ottawa, Ontario, Canada, K1H 8M5.**

POSITIONS OPEN

RESEARCH ASSOCIATE/ POSTDOCTORAL FELLOW

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

RESEARCH BIOLOGIST

Postdoctoral position with USDA, ARS, Fargo, North Dakota 58105, available immediately for molecular biologist/biochemist to join multidisciplinary group studying biochemistry and cell biology of insects. Project includes molecular analyses of cell proliferation, differentiation and nitrogen metabolism, with emphasis on regulation by hormones, polyamines, and xenobiotics. Applicants should have a strong background in cell biology and experience with cell culture and biochemical techniques. Funded for 3 years. Salary range GS-11, \$27,172/GS-12, \$32,567 per annum. Must be U.S. citizen. For information on the research program contact: **Dr. Roger Leopold 701-237-5771, extension 5420.** For information on application procedures/forms, contact: **C. R. Enuton, 301-344-3138, Personnel Division, BARC W, Building 003, Beltsville, MD 20705.** Applications should be marked Code 7W021 and be received by 15 September 1987. *An Equal Opportunity Employer.*

DEPARTMENT OF AGRICULTURAL (USDA) AGRICULTURAL RESEARCH SERVICE (ARS)

RESEARCH GENETICIST (Animal), U.S. Meat Animal Research Center, Clay Center, Nebraska. ARS is seeking a research geneticist to conduct research on genetics of disease resistance in cattle.

Candidate must have knowledge of (i) serological techniques and major histocompatibility system in cattle, (ii) immunogenetics of cattle, and (iii) genetic resistance to disease in cattle.

Ph.D. is desirable. Must be U.S. citizen. Salary is commensurate with experience (\$38,727 to \$50,346 per annum). For information on the research program and/or position(s), contact: **Dr. Larry V. Cundiff, Telephone: 402-762-3241.** For information on application procedures/forms contact: **Mr. Lee J. Triplett, Telephone: 301-344-1863, Personnel Staffing Specialist.** Inquiries must be made by 28 August 1987.

An Equal Opportunity Employer

RESEARCH POSITIONS

PUBLIC HEALTH AND NUTRITION POLICY DIETARY GUIDELINES STUDY

The Food and Nutrition Board of the National Research Council has an opening for a **PROJECT DIRECTOR** and a **STAFF SCIENTIST** to assist a panel of experts in developing strategies for implementing dietary guidelines, to promote health, and reduce the risk of chronic disease, and to examine the implications of these strategies. Responsibilities include assisting the panel in preparing a report on their findings, administrative and scientific duties, collecting and analyzing data, organizing and managing task forces, maintaining contacts, and seeking input from numerous segments of the nutrition community, and preparing background papers. Ph.D. or equivalent in the biological sciences required for both positions. A minimum of 2 years of related experience is required for the staff scientist position. Four years of related experience, including 2 years of managerial experience, is required for the position of project director.

The National Research Council offers competitive starting salaries and an excellent benefits package that includes paid relocation. Please send confidential résumé to: **NRC/FNB, F. Peter, Positions 455.030/31, 2101 Constitution Avenue, NW, Washington, DC 20418. An Equal Opportunity Employer.**

At Baxter we've taken the combined strengths of Baxter Travenol Laboratories and American Hospital Supply to forge a Fortune 75 world leader in the medical products industry. Now, positions are available at our Corporate Research Center in suburban Chicago with our Applied Technologies Group, which provides a wide range of scientific research support for varied corporate needs. These positions offer the opportunity to gain broad exposure to diversified medical products and meet unique scientific challenges while enjoying high corporate visibility.

DIRECTOR OF TOXICOLOGY

Responsibilities include the supervision of a multidisciplinary team of scientists conducting pre-clinical safety evaluation studies as well as requiring substantial interface with federal regulatory agencies, industrial committees, and internal project managers. The successful candidate will have a Ph.D. in Toxicology or be a Veterinary Pathologist with a minimum of 10 years progressive experience managing a toxicology facility involving the evaluation of drugs or medical devices. Board certification highly desirable.

SR. RESEARCH ASSOCIATE— MOLECULAR BIOLOGY

Responsibilities include the development of eukaryotic expression vector systems and gene probes, isolation and analysis of cDNA clones, and DNA sequencing. We are seeking a Ph.D. Biochemist/Molecular Biologist with 1-3 years of postdoctoral experience.

SR. RESEARCH ASSOCIATE— PHARMACOLOGY/ TOXICOLOGY

Responsibilities include designing protocols, conducting toxicity studies, evaluating data and preparing reports for INDs and NDAs. A Ph.D. in Toxicology, Pharmacology or related Life Science is required, along with a minimum of 3 years industrial toxicology experience. A working knowledge of acute, sub-chronic, and chronic toxicology studies involving drugs or medical devices is required.

RESEARCH ASSOCIATE— IMMUNOLOGY

Responsibilities will entail basic immunochemical and immunobiological laboratory procedures, including protein purification and characterization, electro-phoresis, western blot analysis, column chromatography and in vitro and in vivo cell function analysis. An MS in immunology or a related field is required, plus 2-5 years of practical experience with protein/peptide isolation and characterization, and in vitro immunochemical techniques.

At Baxter we're stronger than ever and we're offering better opportunity than ever. We provide an excellent salary and benefits package including retirement and employee stock purchase plans. Send resume/CV with salary history in confidence to: **Director-Human Resources, Applied Technologies-RLA-1N, Baxter Healthcare Corporation, P.O. Box 490, Round Lake, IL 60073.** Equal Opportunity Employer.

Baxter



Vice President for Research and Graduate Studies MICHIGAN STATE UNIVERSITY

Nominations and applications are invited for the position of Vice President for Research and Graduate Studies at Michigan State University, a comprehensive graduate research University. The University comprises fourteen colleges with an enrollment of 41,000 including 7,500 graduate and professional students enrolled in both masters and doctoral programs. The annual research budget is about \$70 million. Michigan State University is a member of the Association of American Universities, the National Association of State Universities and Land-Grant Colleges and the American Council on Education. The Vice President for Research and Graduate Studies reports to the President and shares with the Provost oversight of The Graduate School, and of Lifelong Education Programs.

The person to fill this important position will lead the future development of research and graduate programs at Michigan State University, and should possess the following qualities:

- A background of successful administrative leadership;
- A record of outstanding research, nationally recognized leadership in his/her field;
- Demonstrated ability to negotiate and obtain funding for research and graduate education programs;
- Sensitivity toward and ability to deal with diverse groups representing faculty, students, industry, business, government and the community;
- Commitment to affirmative action in graduate education/research.

Specific Responsibilities Include

- Strategic planning for research and graduate studies;
- Facilitation and oversight of faculty and student research and scholarly activity;
- Oversight of graduate education (jointly with the Provost);
- Administrative oversight of the Dean of the Graduate School (jointly with the Provost) and of the Assistant Provost for Lifelong Education Programs (jointly with the Provost), two assistant vice presidents and staff;
- Supervision of special units, currently the Center for Environmental Toxicology, the Office of Radiation, Chemical and Biological Safety, the Laboratory Animal Care Service, the Industrial Development Institute, the Technology Transfer Center and the MSU Museum.

Preferred Starting Date: January 1, 1988

Procedures

Nominations and letters of application with curriculum vitae should be submitted as soon as possible and preferably by October 1, 1987. Requests for confidentiality will be honored.

Please write to: Professor Robert W. Leader, Chair
Search Committee for Vice President for
Research and Graduate Studies
Office for Research and Graduate Studies
Michigan State University
232 Administration Building
East Lansing, Michigan 48824-1046

Telephone: 517/355-8260

MSU is an Affirmative Action/Equal Opportunity Institution

POSITIONS OPEN

RESEARCH POSITION IN CARDIOVASCULAR PHARMACOLOGY AND PHYSIOLOGY available in well-supported cardiology laboratory. Human, animal, and bench research in cardiovascular, pathophysiology, and pharmacology. Ph.D. or commensurate degree in related science. Contact: **John B. Kostis, M.D., Department of Medicine, University of Medicine and Dentistry of New Jersey—Robert Wood Johnson Medical School, CN-19, New Brunswick, NJ 08903-0019. Equal Opportunity/Affirmative Action Employer, M/F/H/V.**

RESEARCH POSITION: Biochemical Pharmacology and Psychopharmacology. Faculty position available for M.D. or Ph.D. with training and experience in measurements of biogenic amines and metabolites, receptor binding, pharmacokinetics, and subcellular fractionation techniques. Faculty rank and salary commensurate with experience. Send curriculum vitae and names of three references to: **Dr. A. Halaris, Department of Psychiatry, Case Western Reserve University, Cleveland Metropolitan General Hospital, 3395 Scranton Road, Cleveland, OH 44109.**

RESEARCH POSITION: Cellular Immunology and Molecular Biology. The Pulmonary Unit (Medical Services) of the Massachusetts General Hospital has a staff opening for a Ph.D. with a strong background and experience in cellular immunology and molecular biology to work in newly expanded laboratory facilities. Experience in the use of in vitro techniques, including cell culture work, and interest in environmental/occupational immunology are desirable. Please send curriculum vitae and a brief description of research interests to: **L. C. Ginns, M.D., Pulmonary Unit, Bulfinch 1, Massachusetts General Hospital, Boston, MA 02114. An Equal Opportunity/Affirmative Action Employer.**



RESEARCH POSITIONS IN MOLECULAR BIOLOGY WAYNE STATE UNIVERSITY

The Molecular Biology Center at Wayne State University invites applications for multiple research positions for fall 1988 or sooner hire dates at the level of assistant professor (research), associate professor (research) and professor (research), depending upon qualifications and experience. These positions carry generous start-up funds and are part of a major University-wide expansion in molecular biology. A primary goal of the Center is improvement in human health, with a concern for biotechnology implementation. Four broad areas of research are emphasized: gene structure and function, organization of the human genome, synthesis and characterization of new macromolecules (products), and protein structure and function. Candidates with demonstrated research excellence in any area of molecular biology or molecular genetics will be considered. Send application (deadline: 15 November 1987), including curriculum vitae, the names of at least three references, and a statement of future research plans, to:

Orlando J. Miller, M.D.
Director
Molecular Biology Center
Wayne State University
540 East Canfield
Room 3216 Scott Hall
Detroit, MI 48201

Wayne State University is an Equal Opportunity/Affirmative Action Employer and actively seeks applications from women and minority groups.

SENSORY NEUROPHYSIOLOGIST: Tenure-track possibility for position available at assistant professor level. Serious commitment to collaborative work within the Microsurgical Research Center. Expertise required to characterize electrophysiologically the properties of central axons which have regenerated along peripheral nerve implants. Preference given to applicants experienced in spinal cord neurophysiology, and tract-tracing and histological techniques. Please send curriculum vitae with three letters of recommendation to: **Dr. Julia Terzis, Microsurgical Research Center, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, VA 23501.**

POSITIONS OPEN

RESEARCH SCIENTIST MAMMALIAN CELL CULTURE

This position is in an interdisciplinary group with research activities in cardiovascular physiology, cell biology, hemodynamics, and related areas. Experience in mammalian cell culture required, and in hemodynamic studies desired. Qualifications include a Ph.D. and the ability to work independently. The person selected will supervise the mammalian cell culture facility, will have the opportunity to teach and to advise graduate students, and to initiate new research areas. Level of appointment and salary dependent on qualifications. Starting date negotiable. Send curriculum vitae and names and addresses of three references to: **Dr. R. M. Nerem, Bioengineering Center, Georgia Institute of Technology, Atlanta, GA 30332-0405. Telephone: 404-894-2768. Georgia Tech is an Equal Opportunity Employer.**

UNIVERSITY OF ALBERTA DEPARTMENT OF PHYSIOLOGY

The Department of Physiology invites applications for **RESEARCH SCHOLARS** at the assistant professor rank. Successful candidates must have a Ph.D. degree, and have demonstrated outstanding ability for independent research. Preference will be given to investigators in renal physiology, neurophysiology, and/or endocrinology. The successful candidate will also be expected to participate in the department's teaching program. This position will be funded through an external agency such as The Alberta Heritage Foundation for Medical Research (AHFMR), but the successful candidate will enjoy the privileges of the university rank of assistant professor. AHFMR also offers establishment grants for setting up a well-equipped laboratory and for initial operating expenses to the successful candidate.

Interest applicants should submit their curriculum vitae, an outline of their proposed research, and the names of three referees before 4 September 1987 to:

Dr. P. K. T. Pang
Professor and Chairman
Department of Physiology
University of Alberta
Edmonton, Alberta, Canada
T6G 2H7

TENURE-TRACK FACULTY POSITIONS: The Department of Pathobiological Sciences, School of Veterinary Medicine, University of Wisconsin-Madison is seeking:

PARASITOLOGY—an individual with experience in veterinary parasitology to teach a parasitology course to second-year veterinary students, to consult in the clinical parasitologic service and to develop an extramurally funded research program.

INFECTIOUS DISEASES—an individual with training in molecular aspects of infectious disease research. A demonstrated knowledge and application of contemporary technology to solve problems on the pathogenesis and/or epidemiology of infectious diseases is essential.

Salary and rank commensurate with training and experience. Send curriculum vitae and names of at least three references to: **Dr. R. D. Schultz, Professor and Chairman, Department of Pathobiological Sciences, School of Veterinary Medicine, University of Wisconsin-Madison, 2015 Linden Drive West, Madison, WI 53706. The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer. Minorities and women are urged to apply.**

VERTEBRATE COMMUNITY ECOLOGIST. Tenure-track assistant professor. Postdoctoral experience desirable. Research interests may be in any ecosystem using any taxonomic group of vertebrates except fish. Preference given to candidates with teaching experience in mammalogy and/or ornithology. The successful candidate is expected to develop a nationally recognized research program. We seek a person who can complement and strengthen existing programs. Please submit a letter of application, curriculum vitae, reprints, a statement of teaching and research interests, and have three letters of recommendation sent to: **Dr. James W. Haefner, Department of Biology, Utah State University, Logan, UT 84322-5305 before 16 September 1987. Minorities and women are encouraged to apply. An Equal Opportunity/Affirmative Action Employer and IRCA Employer.**

POSITIONS OPEN

The Division of Urology, UCLA School of Medicine, is recruiting a **UROLOGIST** to function as a full-time faculty member primarily in the areas of urodynamics and female urology. Applicants must be Board-certified or Board-eligible, have extensive experience and made sufficient contributions to clinical research in urodynamics, bladder reconstruction and female urology. The applicant must be capable of organizing and supervising a section of neurourology and female urology in a large clinical department. Applicants should submit curriculum vitae, bibliography, and names of references. *UCLA is an Equal Opportunity/Affirmative Action Employer.* Inquiries should be addressed to: **Chief, Division of Urology, UCLA School of Medicine, Los Angeles, CA 90024-1738.**

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP—A 2-year postdoctoral research fellowship position is available in the Division of Medical Oncology, Jefferson Medical College for 1 August 1987 to study the role of HLA in human sarcomas. Candidates should have a Ph.D. degree with strong background in performing gel electrophoresis as well as basic immunology. Tissue culture experience is suggested, but not mandatory. Please submit curriculum vitae and the names of three references to: **Susan F. Slovin, Ph.D., Michael J. Mastrangelo, M.D., Division of Medical Oncology, Jefferson Medical College, Thomas Jefferson University, 1015 Walnut Street, Philadelphia, PA 19107. Thomas Jefferson University is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL FELLOWSHIP AT DUKE UNIVERSITY MEDICAL CENTER

This research project involves the study of the toxin ricin in yeast. A major effort will be the generation of mutant yeast resistant to the toxin, as well as the molecular characterization of these mutations. A related project will involve in vitro and in vivo studies of the functional domains of ricin, both with regard to uptake and toxicity. The position is available immediately at \$18,000 to \$21,000 per year. Contact: **Drs. Arthur E. Frankel (919-684-5060) or Stephen Johnston at (919-684-4123).**

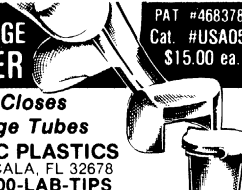
FELLOWSHIPS are available for pre- and postdoctoral study in the Pharmacology Graduate Program of the Grace Cancer Drug Center, Roswell Park Memorial Institute, a Graduate Division of the State University of New York at Buffalo. Stipends and tuition waivers are available for eligible candidates. The program offers diversified training related to the pharmacological, molecular, and biochemical basis for drug action with emphasis on cancer therapeutics. Specific areas include: cellular differentiation and growth regulation, cellular ultrastructure, oncogenes, drug resistance, immunopharmacology and metabolic regulators, inhibition or alteration of nucleic acid, protein and membrane components, pharmacokinetics and drug metabolism, mechanisms of carcinogenesis, genetic basis for drug action, preclinical and clinical pharmacology, medicinal chemistry, and toxicology. U.S. citizens and permanent residents may send applications to:

E. Mihich, M.D., Chairman
Graduate Pharmacology Program
Roswell Park Memorial Institute
Grace Cancer Drug Center
666 Elm Street
Buffalo, NY 14263

Please include curriculum vitae and indicate two references.

An Equal Opportunity/Affirmative Action Employer.

MARKETPLACE



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Our Mission.

At California Biotechnology Inc., our mission is to become the single most important source of biotechnology products vital to human health care in the 1990's and beyond. We're nearing completion of our new state-of-the-art facility. With a strong management team, proper funding and a strategy that enables the company to maximize all of its resources, we're well positioned to build upon our track record of outstanding scientific achievements.

We invite you to consider this opportunity to join a team of dedicated scientists at Cal Bio, where our commitment to innovation and scientific excellence can make an important difference in your future. We've created opportunities in our multidisciplinary Process and Product Development Department at all levels for work in fermentation, isolation, analysis, quality control and formulation of medically active proteins and peptides. All positions require an Ph.D./M.S./B.S. in a related scientific discipline.

Your Future.

All these positions offer an excellent opportunity for career growth, and a highly competitive compensation and benefits package. For consideration, please forward curriculum vitae and names of three references in confidence to: Human Resources, California Biotechnology Inc., Dept. MF-JT, 2450 Bayshore Parkway, Mountain View, CA 94043. An equal opportunity employer.

Cell Culture/ Fermentation Development

You will need 3 or more years' experience in large-scale cell culture techniques and 2 or more years' in the fermentation and expression of recombinant proteins in E. Coli. Experience in scale-up to 500-liters will be helpful.

Downstream Processing

In this area, you'll introduce and apply, novel and classical separation techniques to the development of small- and large-scale purification of proteins. A minimum of 3 years' experience in the recovery, isolation and purification of proteins and peptides produced by recombinant DNA technology is required; familiarity with good manufacturing practices and SOPs will be beneficial. Additional duties require collaboration with others involved in research, structure analysis, quality control and formulation.

Analytical Methods Development

Responsible for the development and implementation of standard testing methods for structural analysis and purity of recombinant proteins, members of this group will have experienced a minimum of 3 years' related work experience. Participate in forming a "grassroots" quality control department which will be responsible for routine testing of raw materials and products, and documentation development for IND submissions and manufacturing practices.

Formulation Development

Qualifications for this area include experience in traditional drug formulation, knowledge of novel delivery systems and sterile filling operations. Three or more years' experience in the formulation of proteins in stable dosage forms is also required.

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