

solved because of lack of information on variation outside it. A complete list of "abbreviations for nomenclatural authorities" compiled by Ralph E. Brooks includes interesting biographical notes. Sporadic use of diacritical marks here and throughout the book is puzzling, however. The glossary, compiled by Eileen K. Schofield, is a handy addition, although illustrations would have been a great help to the nonprofessional reader.

We urgently need a continental Flora, for we have no single reference that provides for plants as they occur throughout North America the kinds of information contained in the *Flora of the Great Plains*. Such a Flora is needed to provide a context for the details found in regional floras. Beyond being a reference that will be useful to a wide variety of readers for many years to come, the *Flora of the Great Plains* serves as an inspiration and a model for a Flora of North America, for it is the product of individuals who recognized a need and, with the support of their own institutions, private foundations, and the National Science Foundation, joined together to fill it successfully.

NANCY R. MORIN
Missouri Botanical Garden,
St. Louis, MO 63166-0299

Books Received

Cellular Logic Image Processing. M. J. B. Duff and T. J. Fountain, Eds. Academic Press, Orlando, FL, 1986. x, 277 pp., illus. \$37.50.

Central and Peripheral Mechanisms of Cardiovascular Regulation. A. Magro *et al.*, Eds. Plenum, New York, 1986. x, 554 pp., illus. \$89.50. NATO Advanced Science Institutes Series A, vol. 109. From an institute, April 1985.

CERES-Maize. A Simulation Model of Maize Growth and Development. C. A. Jones and J. R. Kiniry, Eds. Texas A & M University Press, College Station, 1986. x, 194 pp., illus., + 2 diskettes. \$33.50.

The Chemical Industry and the Projected Chemical Weapons Convention. Vol. 1. Published on behalf of Stockholm International Peace Research Institute by Oxford University Press, New York, 1986. xx, 147 pp., illus. Paper, \$24.95. SIPRI Chemical and Biological Warfare Studies, 4. From a conference, Stockholm, Oct. 1985.

Chemistry and Toxicology of Pyrrolizidine Alkaloids. A. R. Mattocks. Academic Press, Orlando, FL, 1986. xii, 393 pp., illus. \$88.

Cognitive Sciences. Basic Problems, New Perspectives, and Implications for Artificial Intelligence. Maria Nowakowska. Academic Press, Orlando, FL, 1986. xii, 379 pp., illus. \$59.50; paper, \$29.95.

Collected Papers of P. L. Kapitza. Vol. 4. D. ter Haar, Ed. Pergamon, New York, 1986. x, 351 pp., illus. \$100. Translated from the Russian by K. P. Neat and J. B. Sykes.

Collective Motion and Giant Resonances. Z. Wilhelmi and M. Kicińska-Habior, Eds. Harwood Academic, New York, 1986. xiv, 515 pp., illus. Paper, \$190. Nuclear Science Research Conference Series, vol. 8. From a summer school, Mikołajki, Poland, Sept. 1983.

Compactification of Siegel Moduli Schemes. Ching-li Chai. Cambridge University Press, New York, 1986. xvi, 326 pp., illus. Paper, \$29.95. London Mathematical Society Lecture Note Series, 107.

Compilation of Phase II Results with Single Antineoplastic Agents. Robert E. Wittes *et al.*, Eds. Na-

tional Cancer Institute, Bethesda, MD, 1985 (available from the Superintendent of Documents, Washington, DC). x, 477 pp. Paper, \$22. Cancer treatment Symposia, vol. 4, 1985. NIH Publication no. 85-2739.

Computer Chips and Paper Clips. Technology and Women's Employment. Vol. 1. Heidi I. Hartmann, Robert E. Kraut, and Louise A. Tilly, Eds. Panel on Technology and Women's Employment, National Research Council. National Academy Press, Washington, DC, 1986. xx, 216 pp., illus. Paper, \$19.95.

Concepts of Genetics. William S. Klug and Michael R. Cummings. 2nd ed. Scott, Foresman, Glenview, IL, 1986. xx, 699 pp., illus. \$35.95.

Electromyography for Experimentalists. Gerald E. Loeb and Carl Gans. University of Chicago Press, Chicago, 1986. xx, 373 pp., illus. \$60; paper, \$22.

Electrophysiological Techniques in Pharmacology. Herbert M. Geller, Ed. Liss, New York, 1986. x, 195 pp., illus. \$39.50. Modern Methods in Pharmacology, vol. 3.

Embryogenesis. From Cosmos to Creature: The Origins of Human Biology. Richard Grossinger. Illustrated by Jeffrey Parkin. North Atlantic Books, Berkeley, CA, 1986. xvi, 416 pp. \$25; paper, \$12.95.

Hepatitis Viruses and Hepatocellular Carcinoma. Approaches through Molecular Biology and Ecology. Kusuya Nishioka *et al.*, Eds. Academic Press, Orlando, FL, 1985. xvi, 292 pp., illus. \$34.95. From a symposium, Tokyo, Sept. 1984.

The Heredity of Behavior Disorders in Adults and Children. Steven G. Vandenberg, Sandra Manes Singer, and David L. Pauls. Plenum Medical, New York, 1986. xiv, 301 pp., illus. \$35.

Heterojunctions and Semiconductor Superlattices. G. Allan *et al.*, Eds. Springer-Verlag, New York, 1986. viii, 253 pp., illus. Paper, \$52. From a winter school, Les Houches, France, March 1985.

The Hitch-Hiker's Guide to Artificial Intelligence. IBM PC Basic Version. Richard Forsyth and Chris Naylor. Chapman and Hall/Methuen, New York, 1986. x, 262 pp., illus. Paper, \$19.95.

Human Cytogenetics. A Practical Approach. D. E. Rooney and B. H. Czepulkowski, Eds. IRL Press, McLean, VA, 1986. xviii, 241 pp., illus. \$45; paper, \$28. The Practical Approach Series.

Hydrogen Systems. T. Nejat Veziroglu, Zhu Yajie, and Bao Deyou, Eds. China Academic Publishers. Beijing, and Pergamon, New York, 1986. 2 vols. xiv, 560 pp., illus. and vi, 533 pp., illus. \$220. From a symposium, Beijing, May 1985.

Immunological Approaches to Contraception and Promotion of Fertility. G. P. Talwar, Ed. Plenum, New York, 1986. x, 441 pp., illus. \$62.50. Reproductive Biology. From a symposium, Bethesda, MD, June 1985.

Investigation of Rates and Mechanisms of Reactions. 4th ed. Part 2. Investigation of Elementary Reaction Steps in Solution and Fast Reaction Techniques. Claude F. Bernasconi, Ed. Wiley-Interscience, New York, 1986. xiv, 673 pp., illus. \$175. Techniques of Chemistry, vol. 6.

Lindow Man. The Body in the Bog. I. M. Stead, J. B. Bourke, and Don Brothwell. Published for the Trustees of the British Museum by British Museum Publications and Cornell University Press, Ithaca, NY, 1986. 208 pp., illus. \$25.

Living Together. The Biology of Animal Parasitism. William Trager. Plenum, New York, 1986. xii, 467 pp., illus. \$59.50.

Luminous Stars and Associations in Galaxies. C. W. H. de Loore, A. J. Willis, and P. Laskarides, Eds. Published on behalf of the International Astronomical Union by Reidel, Dordrecht, 1986 (U.S. distributor, Kluwer, Norwell, MA). xx, 533 pp., illus. \$94; paper, \$39.50. From a symposium, Porto Heli, Greece, May 1985.

Macroeconomics. An Introduction to the Non-Walrasian Approach. Jean-Pascal Benassy. Academic Press, Orlando, FL, 1986. xiv, 250 pp., illus. \$49.50; paper, \$26.95. Economic Theory, Econometrics, and Mathematical Economics.

Made in Japan. Akio Morita and Sony. Akio Morita with Edwin M. Reingold and Mitsuko Shimomura. Dutton, New York, 1986. x, 309 pp. + plates. \$18.95.

Mind and Brain. Dialogues in Cognitive Neuroscience. Joseph E. LeDoux and William Hirst, Eds. Cambridge University Press, New York, 1986. x, 449 pp., illus. \$54.50.

Modelling the World. The Social Constructions of Systems Analysts. Brian P. Bloomfield. Basil Blackwell, New York, 1986. xvi, 222 pp., illus. \$49.95.

New Vaccine Development. Establishing Priorities. Vol. 2, Diseases of Importance in Developing Countries. Division of Health Promotion and Disease Prevention

and Division of International Health, Institute of Medicine. National Academy Press, Washington, DC, 1986. xvi, 432 pp., illus. Paper, \$43.50.

New Vistas in Nuclear Dynamics. P. J. Brussaard and J. H. Koch, Eds. Plenum, New York, 1986. x, 418 pp., illus. \$69.50. NATO Advanced Science Institutes Series B, vol. 139. From a summer school, Dronten, The Netherlands, Aug. 1985.

New Worlds. In Search of the Planets. Heather Couper with Nigel Henbest. Addison-Wesley, Reading, MA, 1986. 144 pp., illus. Paper, \$12.95.

Nonlinear Dynamics and Chaos. Geometrical Methods for Engineers and Scientists. J. M. T. Thompson and H. B. Stewart *et al.* Wiley, New York, 1986. xvi, 376 pp., illus. \$42.95.

Nonlinear Optics and Quantum Electronics. Max Schubert and Bernd Wilhelm. Wiley-Interscience, New York, 1986. xx, 726 pp., illus. \$59.95. Wiley Series in Pure and Applied Optics.

Nonstandard Methods in Stochastic Analysis and Mathematical Physics. Sergio Albeverio *et al.* Academic Press, Orlando, FL, 1986. xii, 514 pp., illus. \$59.50; paper, \$34.50. Pure and Applied Mathematics.

Numerical and Physical Aspects of Aerodynamic Flows III. Tuncer Cebeci, Ed. Springer-Verlag, New York, 1986. x, 484 pp., illus. \$49. From a symposium, Long Beach, CA, Jan. 1985.

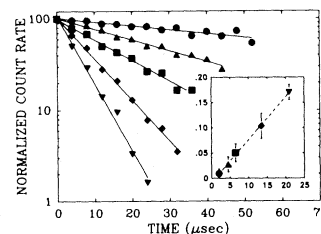
Pests and Parasites as Migrants. A. J. Gibbs and H. R. C. Meischke, Eds. Cambridge University Press, New York, 1986. xiv, 192 pp., illus. \$39.50. From a symposium, Canberra, Australia, May 1984.

Pharmacology and Applications of Chinese Materia Medica. Vol. 1. Hsion-Mou Chang and Paul Pui-Hay But, Eds. World Scientific, Philadelphia, 1986. xviii, 773 pp. \$79. Translated from the Chinese edition by Sih-Cheng Yao, Lai-Ling Wang, and Shem Chang-Shing Yeung.

Upper Main Sequence Stars with Anomalous Abundances. C. R. Crowley, M. M. Dworetzky, and C. Mégessier, Eds. Reidel, Dordrecht, 1986 (U.S. distributor, Kluwer, Norwell, MA). xiv, 489 pp., illus. \$95. Astrophysics and Space Science Library, vol. 125. From a colloquium, Crimea, U.S.S.R., May 1985.

PUBLICATION QUALITY CHARTS AND GRAPHS

from your IBM PC, XT, AT
and HP or compatible plotter.



SIGMA PLOT™ software — \$350.

- Error bars
- Smooth Lines
- Clean diagonals
- Movable labels
- Log/semi-log scales
- And Now!
- Multiple graphs per page
- Curve fitting
- Laser printer support

Load data from keyboard, ASCII or DIF files (including LOTUS 123).
Call or write for more information.

JANDEL SCIENTIFIC
MICROCOMPUTER TOOLS FOR THE SCIENTIST
2656 Bridgeway, Sausalito, CA 94965
800-874-1888 (outside CA)
415-331-3022 (inside CA)

Circle No. 172 on Readers' Service Card

Products & Materials

Symbolic Math Calculator

The HP-28C is a scientific professional calculator capable of solving mathematical problems containing symbols or variables. It can solve symbolic operations in algebra and calculus, and matrices, vectors, and complex numbers may be entered and manipulated. Expressions or statistical data may be plot-



ted on the four-line, 32- by 137-dot matrix display. 120 unit conversions are built in; the user may define more. The HP-28C is programmable, with 250 built-in commands and 60 keyboard commands available. Six keys with variable functions allow one-button entry of commands from the on-screen menus. The calculator features 128 kilobytes of read-only memory. The alphabetic and numeric keyboards are separate. An optional battery-powered thermal printer can communicate with the HP-28C via an infrared beam. Hewlett-Packard. Circle 557.

Protein Structure Software

MSEQ is a software package for analysis, display, and prediction of protein structure. It emphasizes intuitive approaches to amino acid sequence, secondary structure, transverse hydrophobic moments, and hydrophobicity. The package can produce cartoons integrating secondary structure predictions with hydrophobicity calculations based on amino acid sequence. These cartoons or Cartesian coordinates may be plotted in publication quality on a digital x - y

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.

plotter. An accompanying archive diskette contains 111 sequences from most of the major well-characterized gene families. MSEQ operates on IBM microcomputers. University of Michigan Software. Circle 586.

Second-Generation Lab Management Software

The Executive Lab Manager coordinates management of two or more laboratories linked by computer. Executive Lab Manager operates on IBM 4300-, 3080-, or 3090-series mainframes; subordinate labs may have DEC or HP minicomputers. The function of the smaller systems is to collect raw data on-line, schedule testing, control methods, calculate results, and report answers to local laboratory management for approval. Approved sample results are transferred back to the Executive Lab Manager's laboratory information management system, which can also store other relevant data such as inventory records. The Executive Lab Manager allows faster communication, better control of raw materials and intermediates, reduced inventories, and centralized, nonredundant record keeping. Beckman Instruments, Laboratory Automation Operations. Circle 587.

Flow Cytometer

The FACScan is a compact, five-parameter benchtop flow cytometer. It features a 15-mW air-cooled argon ion laser, three fluorescence channels (fluorescein isothiocyanate, phycoerythrin, and red fluorescence), forward scatter, and side scatter. The FACScan requires no external source of water or compressed air. Setup may be automated and operation simplified with an optional CONSORT 30 computer workstation, which has menu-driven software for lymphocyte phenotyping, immune monitoring, DNA analysis, reticulocyte counting, and platelet studies. Becton Dickinson Immunocytometry Systems. Circle 592.

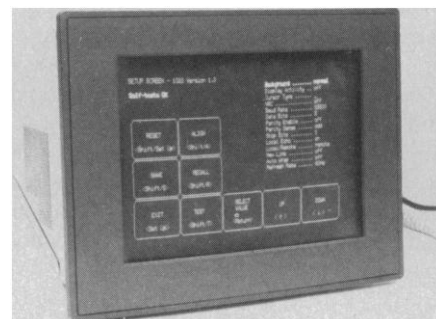
Remote Weighing Ultra Microbalance

Model 32 Ultra Microbalance has a separate weighing unit connected to the balance electronics with a 1.83-m cord. Model 32 has been designed for situations in which sample handling and balance operation must be done separately. It is sensitive to 0.1 μ g and has a 3.5-g maximum capacity. Three weighing ranges accommodate varying sam-

ple masses. Model 32 features push-button controls, rapid calibration, a tare button on the weighing unit, and a digital display that shows the sample's weight to the nearest tenth of a microgram. An optional RS-232 allows connection to a personal computer. Cahn Instruments. Circle 596.

Computer Touch Screen

The 1021 Touch Control Screen may be attached to any computer-based system. It interprets character strings from the host computer to create displays that provide information or that ask the user to select



from the presented choices. The user responds by lightly touching one option. The 1021, acting as a software-configured control panel, then relays the choice to the computer. The touch screen may be mounted into a panel or rack or set on a tabletop. High-level software allows the user to design "touch targets" with only a few commands. ICS Computer Products. Circle 568.

Literature

Guide to Monoclonal Antibody Purification is a poster that discusses gels, current techniques, and the influence of source material in antibody purification. Pharmacia, Laboratory Separation Division. Circle 599.

Cell Line Update lists 100 cell lines and hybridomas indexed by species and originator's designation. American Type Culture Collection. Circle 600.

A Guide to Laboratory Water Purification is a 12-page booklet reviewing water quality standards, common water contaminants, and purification methods. Labconco. Circle 601.

Cellift Applications Update describes an airlift bioreactor for cell cultivation. Ventrex Laboratories. Circle 620.

Centrifuge Tube and Bottle Rotor Matching Guide details which tubes and bottles fit the rotors of specific centrifuges. Nalge. Circle 581.

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, 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.

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 spaces, and all partial lines are counted as full lines. To calculate cost, multiply total lines × \$35.00 = total cost of ad.

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

Agricultural Biotechnology Researcher, B.S. with transformation/regeneration experience at three major corporate laboratories, and M.B.A. in finance from top business school with corporate finance experience, seeks ideas for business or management position utilizing both fields. Telephone: 303-440-7216. X

Anatomist/Zoologist, Ph.D. Broad background, invertebrate/vertebrate biology, embryology; human anatomy; electron microscopy; experienced innovative teacher. Prefer small college teaching. Box 10, SCIENCE. 2/13, 20

Biochemist Ph.D. extensive research experience in enzyme purification and characterization, immobilization and modern laboratory techniques. Many publications. Seeks postdoctoral or research position. Box 11, SCIENCE. X

Chemical/Medical/Business Writer: Seeks free-lance projects—all types. Will organize symposia, seminars, etc. Marsha E. Daman, Ph.D., P.O. Box 554, Bedminster, NJ 07921. Telephone: 201-234-2385. 2/13, 20

Technical Writer, Ph.D. Twenty years of experience in research and writing for scientific, technical, and popular markets. Credits include fifteen books in three languages and articles in varied scientific and academic journals. Seeks free-lance projects of all kinds, including manuals, software documentation, grants and proposals, library research, manuscript critiques and editing, ghostwriting, lectures, and speeches. Box 214, SCIENCE. 2/13, 20

POSITIONS WANTED

Clinical Chemist/Biomedical Scientist, Ph.D. Recently completed COMACC approved clinical biochemistry postdoctoral fellowship. Twelve years' atherosclerosis research on blood platelet/vessel wall interactions. Experience with clinical test development, antibody production, prostaglandin assays, cell metabolism, tissue culture, animal studies, blood platelet technology. Twenty-one publications. Seeking a position in R&D, or clinical laboratory management. Box 18, SCIENCE. 2/13, 20, 27

Ecologist/Field Biologist, Ph.D., seeks employment in teaching and/or research in an ecologically oriented field. Seven years' college level teaching experience. Herbarium experience. Experience as a plant collector in U.S. and New World tropics. Research experience in avian ecology in U.S. and tropics, in plant ecology, and in aquatic toxicology. Publications. Teaching interests include general biology, ecology, evolution, ornithology, and field botany. Principal research interests: forest dynamics and forest succession. Box 19, SCIENCE. X

If you need a **Ph.D. Consulting Scientist** or general tutor, please write or telephone Dr. Ghouri, 509 Connie Lane, Manchester, MO 63011. Telephone: 314-394-0589 (evenings). X

Immunopathologist/Electron Microscopist, Ph.D. seeks position in biomedical company or core/reference laboratory in immunology, DNA hybridization, histochemistry, pathology, or microscopy as director or administrator, 10 years experience in administrative/management/methodology. Box 2, SCIENCE. X

Radiochemist Ph.D. Highly competent with strong background in molecular biology, radiotracer methodology, and more than 9 years of extensive research and development of radiopharmaceutical and animal models in areas of cell labeling and MoAb. Interested in collaboration and desires a challenging position in industry or academia. Box 14, SCIENCE. X

POSITIONS OPEN

EASTERN VIRGINIA MEDICAL SCHOOL ADMINISTRATIVE DIRECTOR OF MICROSURGICAL RESEARCH CENTER

The Eastern Virginia Medical School is presently inviting applications to fill the administrative directorship of the Microsurgical Research Center (MRC). The MRC is a modern, fully equipped research facility whose mission is to promote interdisciplinary teaching as well as basic and clinical research and research training in the microneurosurgical and microsurgical disciplines. The administrative director will be responsible for the daily logistical operations of the laboratory and will work closely with the chairman of plastic surgery and a scientific overview committee in long-term planning and decision making of MRC research and teaching programs. The successful candidate should possess either a Ph.D. or an M.D. coupled with evidence of scholarly achievement in an academic setting with preferred experience as a neuroscientist. A senior scientist with an established history of extramural support will be viewed favorably. Send a letter of intent, a current curriculum vitae, plus three letters of recommendation before 5 March 1987, to:

James H. Carraway, M.D.
Eastern Virginia Medical School
P.O. Box 1980
Norfolk, VA 23501

Eastern Virginia Medical School is an Affirmative Action and Equal Opportunity Employer.

ASSISTANT PROFESSOR IN MICROBIAL PHYSIOLOGY/ECOLOGY, research with aquatic systems preferred. Available fall 1987. Initial position is non-tenure-track. Applicant must have Ph.D. in microbiology. Duties include teaching in microbiology. Appointment is anticipated for 2 years, with possibility of renewal. Send curriculum vitae, publications, statement of research interests, and have forwarded three recommendations by 16 April 1987 to: **Dr. Iola T. McClurkin, Chair, Microbiology Search Committee, Biology Department, University of Mississippi, University, MS 38677.**

An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ANATOMY: ASSISTANT PROFESSOR, Ph.D. The Department of Anatomy, Life Chiropactic College, invites applications for the position of assistant professor beginning January 1987. Applicants would be expected to teach gross and/or neuroanatomy. Salary is dependent upon qualifications and experience. Send curriculum vitae with references to: **Dr. Macon Weaver, Chairman, Department of Anatomy, Life Chiropactic College, 1269 Barclay Circle, Marietta, GA 30060.**

PHYSICAL AND/OR BIOLOGICAL SCIENCES—ASSISTANT PROFESSOR, Ph.D. in the natural sciences. Teaching in freshman-sophomore general education program. Position available September 1987. Deadline for applications 1 April 1987. Tenure-track, salary negotiable. Send résumé and three recommendations to: **Dr. Charles P. Fogg, Division of Science, College of Basic Studies, Boston University, 871 Commonwealth Avenue, Boston, MA 02215.** *An Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR: The Biology Department of the University of Texas at Arlington (UTA) seeks an individual with demonstrated expertise in theoretical and empirical **Population Biology** (broadly defined) for a tenure-track position starting fall 1987. UTA (23,000 enrollment) is located between Dallas and Fort Worth. The department of 22 faculty and 40 graduate students occupies an 80,000-square-foot research/teaching facility. Applicants should send curriculum vitae, recent publications, statement of research interests, and four letters of recommendation to: **Chairman, Search Committee, Department of Biology, The University of Texas at Arlington, Arlington, TX 76019.** Search will open 16 March 1987. *UTA is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR (Environmental Chemistry). Ph.D. in environmental chemistry or engineering and interest in graduate and undergraduate teaching and both independent and collaborative research interests are expected. Send curriculum vitae and arrange for three letters of reference to be sent to: **Dr. C. N. Haas, Pritzker Department of Environmental Engineering, Illinois Institute of Technology (IIT), Chicago, IL 60616.** *IIT is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR OF PHARMACOLOGY/TOXICOLOGY. Tenure-track position available 1 July 1987. Duties include teaching and research. Requires Ph.D. in pharmacology, 2 years of postdoctoral experience, and ability to establish independent fundable research. Area of specialization is open. Send résumé and names of references to: **Search Committee, Pharmacology Department, School of Medicine, University of North Dakota (UND), Grand Forks, ND 58202** by 30 March 1987. *UND is an Equal Opportunity Employer.*

ASSISTANT PROFESSOR—PHYSIOLOGY. Tenure-track position to begin August 1987. A strong background in physiology is essential; background in cell biology is desirable. Ph.D. required; teaching experience desirable. Candidates should send curriculum vitae, transcripts, and three professional references by 20 March 1987 to: **Michael Goodrich, Chairman, Department of Zoology, Eastern Illinois University, Charleston, IL 61920.** *Affirmative Action/Equal Opportunity Employer. Applications from women, minorities and handicapped people are encouraged.*

The Harry S. Truman Memorial Veterans Hospital, a Dean's Committee Hospital attached to the Hospital of the University of Missouri—Columbia School of Medicine, is seeking a new **ASSOCIATE CHIEF OF STAFF FOR RESEARCH AND DEVELOPMENT.** The candidate should have wide understanding of biological science and be active in research. In addition the candidate must be prepared to assist investigators in grant preparation as well as administrative and committee responsibilities, occupying approximately 20% of scheduled time. Outside income may be supplemented through the University of Missouri, Columbia, MO. Please submit curriculum vitae and letters of application to: **James Butt, M.D., Chairman, Search Committee for the ACOS/R and D (111C), Harry S. Truman Memorial Veterans Hospital, 800 Hospital Drive, Columbia, MO 65201,** no later than 1 April 1987. *An Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT RESEARCH SCIENTIST—Candidate with Ph.D. in biochemistry or related area to study DNA repair enzymology. Experience in some aspects of nucleic acid chemistry desirable. Familiarity with HPLC techniques helpful. Send curriculum vitae and names of three references to: **Joan Harmon, Personnel Department, New York University Medical Center, 317 East 34 Street, New York, NY 10016. An Equal Opportunity/Affirmative Action Employer, M/F.**

ASSISTANT RESEARCH SCIENTIST POST-DOCTORAL POSITION available early 1987, for candidate with doctorate in molecular biology, virology, or cell genetics to work on research project involving the cloning and characterization of genes regulating cell cycle progression in animal cells; regulation of polyoma virus gene expression in transformed cells; and the study of a novel human oncogene derived from Kaposi's sarcoma DNA. Send curriculum vitae and names of three references to: **Joan Harmon, Personnel Department, New York University Medical Center, 317 East 34 Street, 7th Floor, New York, NY 10016. An Affirmative Action/Equal Opportunity Employer M/F.**

ASSISTANT SCIENTIST

There is an immediate opening in the immunopharmacology section for a full-time position involving research on inflammatory and immune mechanisms in human disease. Job responsibilities of this assistant scientist level position will entail both in vitro and in vivo experimentation. Familiarity with tissue culture techniques and the ability to work with small laboratory animals are essential. Experience in the area of interleukin research (IL-1 or IL-2) is highly desirable. A Bachelor of Arts or equivalent is required. Our facilities, located in Ann Arbor, are centrally located and equipped with the most recent technological advances. Our salaries are highly competitive, and we offer an outstanding benefits package. If qualified, please send your résumé, in confidence, to:

Ms. S. Hultquist
Human Resources Department
Warner-Lambert/Parke-Davis
Pharmaceutical Research
2800 Plymouth Road
Ann Arbor, MI 48105
Equal Opportunity in Action

ASSISTANT/ASSOCIATE PROFESSOR OF PHARMACOLOGY

The expanding Department of Pharmacology at Northeastern Ohio Universities College of Medicine invites applications from individuals with strong research credentials in CNS pharmacology for a tenure-track position, available immediately, at the level of assistant or associate professor. Applicants must have a Ph.D. degree, have completed not less than 2 years of postdoctoral training, and have demonstrated ability to conduct independent research. Some teaching experience is desirable since the position requires participation in teaching of medical and graduate students. The medical school is housed in a modern facility on 55 acres and is in close proximity to a wide variety of living styles. Many opportunities are available in the geographic area for academic and scientific interactions. Send curriculum vitae including the names of three references by 15 March 1987 to: **Dr. Martin D. Schechter, c/o the Office of Human Resources, Northeastern Ohio Universities College of Medicine, 4209 Street Route 44, Rootstown, OH 44272. An Affirmative Action/Equal Opportunity Employer.**

ASSOCIATE DEAN FOR RESEARCH

Reports to Vice President for Academic Affairs/Dean of the School of Medicine. Primary duty is to foster research activity in the School of Medicine. Includes: identifying potential sponsors; assisting faculty with proposals; facilitating interdisciplinary collaboration. Also, organizing and supervising programs for medical student and graduate student research. Supervises IRB; animal welfare committee and related research support activities. Advises on use in research of space, equipment, and other College resources. Experience in independent research and in review/management of federal research grants essential. Contact: **Frank G. Standaert, M.D., Vice President for Academic Affairs and Dean of the School of Medicine, Medical College of Ohio, C.S. 10008, Toledo, OH 43699. An Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR THE UNIVERSITY OF NORTH CAROLINA at CHAPEL HILL

The Department of Physiology invites applications for one or two tenure-track positions from individuals with research interests in molecular or cellular physiology. We seek outstanding candidates to complement present interests in neurobiology, molecular endocrinology, cell biology, renal and cardiovascular physiology. Submissions from applicants with experience in any research area are welcome, but those studying functional aspects of hormone receptor interactions, signal transduction mechanisms, or cell-cell communication will be given first consideration.

Qualifications include a Ph.D. or M.D. degree and 3 years of postdoctoral research experience. The successful candidate(s) will join a diverse and interactive faculty. He/she will be expected to develop a vigorous independent research program and participate in departmental teaching. The department and university provide an outstanding environment for faculty development.

Completed applications should include a detailed curriculum vitae, a description of future research plans, copies of two recent publications, and letters from three references. This material should be received prior to 15 April 1987. Address correspondence to:

Chairman, Physiology Search Committee
Department of Physiology 206 H
University of North Carolina at Chapel Hill
Chapel Hill, NC 27514

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

ASSISTANT OR ASSOCIATE PROFESSOR OF SURGERY—NONTENURE TRACK, UNIVERSITY OF CALIFORNIA, SAN DIEGO. The Department of Surgery is seeking candidates for a faculty position as an electrophysiologist to study ion transport and electrical charges in human and animal models of colorectal cancer. The incumbent will design and supervise experiments aimed at understanding cellular and epithelial electrophysiologic events in colon cancer with eventual application in the early diagnosis of pre-malignant changes in the colonic epithelium of human subjects. The position requires a Ph.D. in physiology, biophysics, electrophysiology, or related areas; experience and productivity in above-mentioned scientific investigation preferred; experience in supervising technicians and experiments, assisting in grant writing and experimental design, presentation, and publication of research papers; teaching of medical students and residents. Closing date: 30 March 1987. Send curriculum vitae and bibliography to: **Richard J. Davies, M.D., H891B, UCSD Medical Center, 225 Dickinson Street, San Diego, CA 92103.** Salary related to academic rank and step within the established salary schedule of the University of California, San Diego. This position is guaranteed for 2 years and further extension is dependent upon funding. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR OF PATHOLOGY—The School of Veterinary Medicine, University of California, Davis, is seeking applications for an assistant professor of veterinary pathology. Candidates must have a D.V.M. (or equivalent) and a Ph.D. with advanced training in pathology. Board certification by the American College of Veterinary Pathology is required. There should be evidence of developed interest in, and commitment to, a specialized field of research. The candidate will participate in the departmental teaching programs at the professional (D.V.M.) and postgraduate levels, including a share of service duties in necropsy and surgical pathology at the Teaching Hospital. An important responsibility will be to establish an active independent research program. Existing research programs in the department with which the appointee could interact are: immunopathology; pathogenesis of viral diseases; reproductive pathology; neuropathology; toxicologic pathology; pulmonary pathology, and pathology of bones and joints. The salary is commensurate with qualifications and experience. The starting date is 1 July 1987 with a deadline for receipt of applications being 15 March 1987 or until filled.

Applicants should send curriculum vitae and the names of at least three references to: **Dr. D. L. Dungworth, Chairman, Search Committee, Department of Pathology, School of Veterinary Medicine, University of California, Davis, CA 95616.**

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

POSITIONS OPEN

ASSOCIATE OR FULL PROFESSOR OF PATHOLOGY—The School of Veterinary Medicine, University of California, Davis, is seeking applications for an associate or full professor of veterinary pathology. Candidates must have a D.V.M. (or equivalent) and a Ph.D. with advanced training in pathology. Preference will be given to persons with board certification by the American College of Veterinary Pathology. Candidates should have established a record as principal investigator of an extramurally funded research program relating to the pathogenesis of disease at the cellular or molecular level. The candidate will participate in departmental teaching programs at the professional (D.V.M.) and postgraduate levels. The appointee will be expected to make an important contribution to the research programs of the department. The salary is commensurate with qualifications, experience, and rank at appointment. The starting date is 1 July 1987 with a deadline for receipt of applications being 15 March 1987 or until filled.

Applicants should send curriculum vitae, and the names of at least three references to: **Dr. D. L. Dungworth, Chairman, Search Committee, Department of Pathology, School of Veterinary Medicine, University of California, Davis, CA 95616.**

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

ASSOCIATE PROFESSOR—CLINICAL PATHOLOGY/PREVENTIVE MEDICINE. Teach preventive medicine, microbiology, parasitology. Develop system to study liver stages of *P. falciparum*, *P. ovale*, and *P. vivax*. Characterize and purify antigens of malaria and other microbes. Develop diagnostic tests. \$56,363 per year. M.D. with 3 years of research experience in parasitology. Board certification in clinical pathology and publications required. Send curriculum vitae to: **Peter Perine, M.D., Civilian Personnel, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, MD 20814-4799.**

BIOCHEMIST MANAGER

Reference laboratory has opening for Department Manager in Peptide Hormone Section. Position will involve research and development work along with technical and personnel management. Applicant must be Ph.D. level biochemist or clinical chemist with strong background in all phases of peptide immunoassays, including developmental work. Salary dependent on job experience. Excellent job benefits program. Send résumé and salary history to: **Box 16, SCIENCE.**

BIOCHEMIST MANAGER

Leading reference laboratory seeks Ph.D. biochemist or equivalent with strong background in steroid hormones and related assay procedures. Position involves research and development work, as well as laboratory management training and supervision. Salary dependent on experience. Excellent job benefits. Applicants with appropriate background, send résumé and salary history to: **Box 17, SCIENCE.**

BIOCHEMIST/PHYSIOLOGIST

The Division of Gastroenterology at Henry Ford Hospital, Detroit, Michigan, seeks qualified Ph.D. with 2 to 4 years of postdoctoral training and experience in transport physiology and molecular biology. The successful applicant will participate in ongoing research on the effects of bile acids and lipids on intestinal transport and develop an independent research program supported by intramural and extramural funds. Academic appointment at affiliated institutions depending on qualifications. Please send curriculum vitae, outline of research interests, and names of three references to: **Helmut V. Ammon, M.D., Division Head, Gastroenterology, Henry Ford Hospital, 2799 West Grand Boulevard, Detroit, MI 48202.**

BIOLOGIST: Tenure-track position for a broadly trained Ph.D. with a strong background in animal physiology anticipated for fall term, 1987. Candidates should be able to teach human anatomy/physiology, organismal physiology, vertebrate zoology, and ecology. Must be committed to excellence in teaching at a small, church-related, liberal arts college in a rural setting. Send letter, résumé, and references to: **Dean J. A. Knight, Erskine College, Due West, SC 29639.**

Project Leader Vascular Pharmacology

Berlex Laboratories, Inc. is a rapidly growing pharmaceutical company located in Northern New Jersey doing important basic cardiovascular research. We have an opening for a Senior Scientist to organize and lead a vigorous research program in vascular pharmacology. The Project Leader will manage a staff of both junior and senior scientists and undertake new drug discovery efforts and basic research in vascular pharmacology and physiology.

The successful applicant will have a Ph.D. in Physiology or Pharmacology with at least five years of postdoctoral experience in the area of vascular smooth muscle biology or congestive heart failure and an interest in both research and research management.

Berlex offers a stimulating environment with opportunity for personal challenge and growth. Contact Jay R. Wiggins, Ph.D., Associate Director, Department of Pharmacology, Berlex Laboratories, Inc., 110 East Hanover Avenue, Cedar Knolls, New Jersey 07927. An

BERLEX Equal Opportunity Employer
M/W/H.
Laboratories Inc.

Biosensor Breakthrough

Molecular Devices Corporation patented revolutionary silicon sensor technology last May. Our proprietary approach allows on-site analyses of ions, enzymes, drugs, proteins, and bacteria on the same sensor within minutes.

Microbiologist

We are seeking a PhD or MS Microbiologist to investigate and develop a proprietary system combining chemistry and instrumentation for the detection of bacterial and viral pathogens. Three-plus years' experience with generation and application of monoclonal antibodies to diagnostic procedures, as well as strong clinical microbiology background is desired.

To apply, please send your résumé to Human Resources, Molecular Devices Corporation, 3180 Porter Drive, Palo Alto, CA 94304. An equal opportunity employer.

 **Molecular
Devices**

RESEARCH BIOLOGISTS

Wyeth Laboratories' Radnor facility is a major pharmaceutical company's center for R&D. As part of a major, on-going expansion, we require additional Research Molecular Biologists:

Molecular Virologist

A position is available in Wyeth's expanding AIDS vaccine program. A Ph.D. in Microbiology, Biochemistry, or Molecular Biology is required with strong post-doctoral experience in molecular virology of animal DNA viruses or retroviruses. The successful candidate should be highly skilled in virology with special emphasis in molecular genetics and recombinant DNA technology.

Nucleic Acid-Sequencing Biochemist

A position is available for Ph.D. with a strong background in nucleic acid sequencing, oligonucleotide synthesis and gene assembly. Strong post-doctoral work and demonstrated ability are essential.

Research Immunologist

An Immunologist with expertise in immune responses to viral infections to play a key role in the development and testing of genetically engineered viral vaccines. Candidates should have a Ph.D. with strong post-doctoral experience, and skill in *in vivo* animal models.

You will enjoy working in our modern, well-equipped facilities in Philadelphia's prestigious Main Line suburban area. Besides an environment which fosters discovery, we offer a competitive salary, excellent benefits, and superior career opportunities.

Respond immediately by forwarding your CV and salary requirements, in confidence, to: **Recruitment Manager, Wyeth Laboratories, Inc., P.O. Box 8299, Philadelphia, PA 19101.** Equal Opportunity Employer. M/F/H/V responses encouraged.

Wyeth Laboratories



TM

POSITIONS OPEN

BIOCHEMIST VISITING ASSISTANT PROFESSOR (Advanced Rank possible in exceptional circumstances)

Applicants with backgrounds in biochemistry, development, and cellular biology are desired. Teaching responsibilities include courses in developmental biology and cellular biology/biochemistry. This is a 3-year visiting position which requires a Ph.D. degree. Postdoctoral experience is desirable. The position is available 1 July 1987. Please have curriculum vitae, a statement of your research and teaching interests, and three letters of recommendation sent to: **Professor Henry W. Art, Chairman, Biology Department, Williams College, Williamstown, MA 01267** by 1 March 1987. We will start the evaluation of potential candidates immediately.

An Equal Opportunity/Affirmative Action Employer. Williams College especially welcomes applications from women and minority candidates.

LOCK HAVEN UNIVERSITY LOCK HAVEN, PA 17745

BIOCHEMIST/ORGANIC CHEMIST FACULTY POSITION, full time, tenure-track, will be available at the instructor or assistant professor level starting in September 1987. Ph.D. in chemistry required; prior college teaching required. Candidate must be competent to teach undergraduate level courses in biochemistry, qualitative organic analysis and be competent in the use of traditional chemical instrumentation. Excellence in and enthusiasm for undergraduate instruction is of primary importance. Lock Haven University has an enrollment of over 2600 students, and is one of fourteen state universities. Rank and salary commensurate with qualifications. Excellent fringe benefits. Send letter, curriculum vitae, copies of transcripts, and the names, addresses, and telephone numbers of at least three professional references to: **Alfred Hoberman, Chairman, Department of Chemistry/Physics/Geoscience, Lock Haven University, Lock Haven, PA 17745**, by 20 March 1987. *Lock Haven University is an Equal Opportunity/Affirmative Action Title IX Employer.*

BIOCHEMISTRY FACULTY POSITION AT UNIVERSITY OF WISCONSIN-MADISON

The Department of Biochemistry at the University of Wisconsin-Madison invites applications for a position as assistant, associate or full professor in the areas of bioprocessing, fermentation biochemistry, microbial physiology, and/or cell physiology. Candidates must have demonstrated excellence and independence in biochemical research, and have a strong background of training in biochemistry. The University is developing a Biotechnology Center, and this position can be expected to involve strong interactions with that Center as well as with departments such as bacteriology, food science, food microbiology and toxicology, genetics, and chemical engineering. The facilities of the Biochemistry Department include a pilot plant and the Department is committed to the development of a state-of-the-art facility for growing organisms. The successful candidate will be expected to take a leading role in the development and administration of this facility. Applications, including a complete curriculum vitae and plans for future research, should be sent to: **Dr. W. S. Reznikoff, Department of Biochemistry, University of Wisconsin-Madison, Madison, WI 53706**, and candidates should have letters sent from three people familiar with them and their work. Applications should be received by 15 April 1987 in order to guarantee consideration. *The University is an Affirmative Action, Equal Opportunity Employer, and applications are encouraged from women and minorities.*

COASTAL MARINE SCIENTIST. Tenure-track assistant professor in Marine Science beginning August, 1987. Ph.D. in a field involving physical or geological aspects of the coastal ocean expected. Position is in a strong and developing undergraduate Marine Science degree program and offers an opportunity for individual research development in association with the Belle W. Baruch Marine Field Laboratory. Send curriculum vitae and names of three references postmarked by 28 February 1987 to: **Dean, School of Science, Coastal Carolina College, University of South Carolina, Conway, SC 29526**; telephone: 803-347-3161. *Coastal Carolina College is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

BIOLOGICAL ANTHROPOLOGIST

EMORY UNIVERSITY seeks an outstanding biological anthropologist for a tenure-track position at the assistant professor level. Our growing department maintains a commitment to the unified conception of anthropology and sets a high standard of excellence. Candidates may represent any subfield of biological anthropology, and must show both outstanding research potential and excellence in teaching. Interest in general anthropology, as evidenced by willingness to teach a four-field introductory anthropology course at least occasionally, is desirable. Ph.D. required. Deadline 15 October 1987. Send letter of application, including curriculum vitae with names and addresses of three references, to: **E. O. Smith, Chair of Search Committee, Department of Anthropology, Emory University, Atlanta, GA 30322**. *Emory University is an Equal Opportunity/Affirmative Action Employer.*

BIOLOGY TEACHING OVERSEAS: The Department of Biology at the American University of Beirut in Lebanon invites applications for tenure-track faculty positions available 1 October 1987 in the following fields: developmental biology, plant taxonomy, vertebrate or invertebrate biology, genetics, or ecology. Applicants should hold Ph.D. and appointments are normally for 3 years in the rank of assistant professor with appropriate fringe benefits for expatriate staff. The department has a faculty of nine, undergraduate B.S. program, and M.S. graduate program with thesis. Interested persons may send curriculum vitae and names of three references to: **Personnel Services, American University of Beirut, 850 Third Avenue, 18th Floor, New York, NY 10022**.

American University of Beirut is an Equal Opportunity/Affirmative Action Employer.

BIostatistician. Tenure-track position at associate professor or professor level. To build and head biostatistical unit in dynamic, heavily funded, research-oriented medical school. Unit will serve entire college. Competitive salary. To start July 1987. Ph.D. required, medical school experience preferred. Curriculum vitae, reprints, three references by 31 March 1987, to: **Marshall B. Jones, Chairman, Department of Behavioral Science, The Pennsylvania State University College of Medicine, Hershey, PA 17033**. *Affirmative Action/Equal Opportunity Employment.*

CHAIRMAN, DEPARTMENT OF ANATOMY LOUISIANA STATE UNIVERSITY MEDICAL CENTER, SHREVEPORT. The School of Medicine invites nominations and applications for the chairmanship of an expanding Department of Anatomy. Candidates with experience in anatomy and/or cell biology must have an outstanding record of research, strong commitment to medical and graduate education and the vision and experience to lead a department of excellence. Applicants must provide curriculum vitae, names of three references, and a statement of research interests to: **Dr. James E. Smith, Chairman, Anatomy and Cell Biology Search Committee, Louisiana State University Medical Center, P.O. Box 33932, Shreveport, LA 71130**. *Affirmative Action/Equal Opportunity Employer.*

UNIVERSITY OF TORONTO CHAIRMAN—DEPARTMENT OF PHARMACOLOGY

The University of Toronto is seeking a chairman of the Department of Pharmacology. The successful candidate must qualify for the rank of professor and hold an M.D. or Ph.D. degree. Duties include the provision of academic leadership in research and teaching, and responsibility for overall departmental administration. The candidate should have a record of outstanding research in pharmacology or a closely related discipline. Preference will be given to those with extensive experience in, or familiarity with, modern biological research techniques, especially at the molecular level. The University of Toronto encourages both women and men to apply for positions. Applications, including curriculum vitae, should be forwarded to: **Dr. Keith L. Moore, Associate Dean, Basic Sciences, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada M5S 1A8** as soon as possible. *In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.*

POSITIONS OPEN

CELL BIOLOGIST. Department of Biological Sciences, Mount Holyoke College, invites applications for temporary position, assistant professor level, 1987-88 academic year. Ph.D. and transmission and scanning electron microscopy experience required. Responsibilities: teaching advanced undergraduate cell biology, participation in introductory or intermediate course appropriate to interests of candidate, and oversight of electron microscope facility. Applicants should have research interests that can involve undergraduates. Send curriculum vitae, research statement, transcripts, reprints of key publications, and three letters of recommendation to: **Dr. Marilyn Pryor, Chairman, Department of Biological Sciences, Mount Holyoke College, South Hadley, MA 01075**. Deadline: 15 March 1987. *Mount Holyoke is an Equal Opportunity/Affirmative Action Employer. Women and members of minority groups are especially encouraged to apply.*

CHAIRMAN DEPARTMENT OF PHYSIOLOGY

The Medical College of Ohio, a free-standing state-supported academic health science center, invites applications and nominations for the position of Chairman of the Department of Physiology. The nominees should have distinguished records of accomplishments in biomedical research, and appropriate experience in medical and graduate education. The successful candidate will be expected to recruit new faculty and to provide leadership in the development of new programs in molecular and cellular physiology. Nominations and applications should be received no later than 15 March 1987, and should be addressed to: **Amir Askari, Ph.D., Chairman, Search Committee for Physiology Chairman, Department of Pharmacology, Medical College of Ohio, Toledo, OH 43699**. *Equal Opportunity Employer*

CLINICAL MICROBIOLOGIST—FACULTY POSITION—MEDICAL TECHNOLOGY PROGRAM—University-based 2+2 Medical Technology Program is now accepting applications for an **ASSISTANT PROFESSOR**, 9-month, tenure-track position. Minimum requirements: master's degree with a doctorate preferred, minimum of 3 years of clinical and/or teaching experience, and national professional certification. Duties: Primary teaching responsibilities include the development and implementation of lecture and laboratory courses in clinical microbiology; limited responsibilities for clinical practicum; participation in advisement of students and University service required. The successful candidate will be expected to maintain an active research program in his/her area of expertise. Available: 1 September 1987. Contact: Submit nominations and applications including a full curriculum vitae with copies of publications and three letters of evaluation (sent separately) by 30 March 1987, to: **Milton H. Stetson, Ph.D., Chairperson, Medical Technology Search Committee, School of Life and Health Sciences, University of Delaware, Newark, DE 19716**. *Equal Opportunity/Affirmative Action Employer.*

ENDOWED CHAIR IN NEPHROLOGICAL RESEARCH

The Department of Medicine of the University of Florida, College of Medicine, is seeking applications for an **ENDOWED CHAIR IN NEPHROLOGICAL RESEARCH**. The endowed chair, with assets in excess of \$1 million, was established by the State of Florida's Eminent Scholars Program and was made possible by a generous contribution from a private donor. The individual who will fill the chair will have a full-time faculty appointment in the Division of Nephrology, Hypertension and Transplantation in the Department of Medicine of the University of Florida College of Medicine. The appointee should have an M.D. or M.D./Ph.D. degree and a well-established, creative and productive research program. Appropriate areas of research include molecular biology and biochemistry, immunology, transport physiology, hypertension, and cell biology. Salary is negotiable commensurate with education and experience. Anticipated starting date is 1 September 1987. Interested individuals should write by 31 May 1987: **James E. McGuigan, M.D., Chairman, Search Committee, Chair in Nephrological Research, Department of Medicine, College of Medicine, Box J-277, University of Florida Health Center, Gainesville, FL 32610**. *The University of Florida is an Equal Opportunity/Affirmative Action Employer.*



QUEEN ELIZABETH II AWARDS

The Australian Government has established the National Research Fellowships—Queen Elizabeth II Awards to replace the previous Queen Elizabeth II Fellowships and Queen's Fellowships Schemes. Under this Scheme, 15 awards will be made annually. Fellowships may be taken up in industry, universities, colleges of advanced education or government research organisations in Australia and are normally for two years. Tenure of a Fellowship is expected to commence within nine months of the announcement of the award. The awards are for high quality research work in one of the three categories described below:

1. FUNDAMENTAL RESEARCH
2. INDUSTRY BASED RESEARCH
3. RESEARCH IN PRIORITY AREAS OF NATIONAL INTEREST

QUALIFICATIONS: Fellowships will be awarded to persons holding a PhD or equivalent qualifications, or equivalent research or professional experience in one of the disciplines available under the National Research Fellowships Scheme. The decisions regarding equivalent qualifications will be made on a case by case basis. Recommendations for the award of Fellowships will be made to the Minister for Science by an Advisory Committee. Awards will, in general, be restricted to applicants who are not more than 30 years of age when applications close, but consideration will be given to older people with less than five years post doctoral experience who have had an interrupted or late start to their academic career.

ELIGIBILITY: Fellowships will be awarded on merit to suitably qualified persons.

SALARY: \$29 110 (Australian) per annum—increased to \$31 605 per annum at age 28 years.

TRAVEL EXPENSES: Necessary travel expenses are payable.

APPLICATIONS: Persons interested in applying for the above fellowships should obtain application forms and a statement of the conditions of award form: **Executive Officer, National Research Fellowships Scheme, Department of Science, PO Box 65, Belconnen, ACT, 2616, Australia.**

The next round of awards will be announced in October 1987. Applications received after the closing date of 17 April 1987 will not be considered.

OPPORTUNITIES TO RESEARCH AND DEVELOP NEW & IMPROVED DIAGNOSTIC PRODUCTS

As a result of sustained growth and a firm commitment to the future, Fisher Diagnostics is seeking talented, hard-working professionals to fill highly-visible positions which offer great career potential within Fisher Scientific/Instrumentation Laboratory Medical Division.

BIOCHEMIST/Coagulation: Requires MS or Ph.D. in Biochemistry with special emphasis on protein chemistry and enzyme kinetics. A strong background in coagulation biochemistry as well as hands-on experience with diverse instrumentation necessary.

CLINICAL CHEMISTS/Immunochemistry: Several openings requiring BS, MS or Ph.D. in Biochemistry, Immunology, Microbiology, Virology (or related fields). Work on development of Immunoassay diagnostic test kits. Experience with latex a plus.

BIOMEDICAL/CHEMICAL ENGINEER: MS or Ph.D. in Chemical or Biomedical Engineering desired to develop fluid flow synthetic membrane filtration system for use in solid phase immunoassay. Experience in enzyme/protein immobilization and immunology desirable.

Our laboratories are based in ORANGEBURG, NEW YORK, located on the west side of the Hudson River...within 30 minutes of New York City. Interested candidates should forward their resume which must include salary history and requirements, INDICATING AREA OF EXPERTISE, in strictest professional confidence, to: **Personnel Manager, Fisher Diagnostics, 526 Route 303, Orangeburg, New York 10962.** An equal opportunity employer m/f/h.

**Fisher Scientific
Group, Inc.
Fisher Medical Division**

Project Leader

Genetic Systems Corporation, a division of Bristol-Myers, performs research dedicated to pursuing novel approaches to the development of diagnostic and therapeutic products in the areas of immunology, infectious diseases and cancer.

The position involves coordination of development of HLA-related immunoassay. Proven management and organizational skills and background in immunoassays essential. Experience with FDA submissions preferred. Job will involve product development responsibilities as a member of a strong scientific team.

Qualified candidates should possess an advanced degree or equivalent experience. For consideration, please send your curriculum vitae to: **Personnel, Genetic Systems Corporation, 3005 First Avenue, Seattle, WA 98121.**

Genetic Systems Corporation offers a creative work environment, competitive salaries and an excellent benefit package. EOE/AA.



Genetic Systems
CORPORATION

Goddard Space Flight Center

SEEKS A

DIRECTOR OF SPACE AND EARTH SCIENCES

Scientific leader of NASA's largest Space Science organization

750 scientists and engineers

6 Laboratories

Laboratory for Atmospheres
Laboratory for Terrestrial Physics
Laboratory for High Energy Astrophysics
Laboratory for Oceans
Laboratory for Astronomy and Solar Physics
Laboratory for Extraterrestrial Physics

Goddard Institute for Space Studies (New York)

2 Divisions

Space Data and Computing Division
Administration and Resources Management Division

2 Project Management Offices

Crustal Dynamics Project
Orbiting Satellites Project

Reporting to the Director, Goddard Space Flight Center, the position is in the Senior Executive Service; salary range is \$61,296-72,300, depending upon qualifications.

Candidates must have a Ph.D. or equivalent education or experience, and a research background in space and/or earth sciences including a substantial record of publications and/or significant responsibility for guidance of the scientific content of major programs in the space and/or earth sciences. Candidates must have demonstrated an ability to provide interdisciplinary program leadership, and to direct and participate in programs and projects in a broad spectrum of theoretical and experimental research in the space and/or earth sciences. A familiarity with the content, objectives and purposes of NASA's scientific program is highly desirable.

A Standard Form 171, Application for Federal Employment (available at Federal Job Information Centers or from the address below), should be sent to **NASA/Goddard Space Flight Center, Attention: Ms. Arietta Love, Code 221, Greenbelt, Md. 20771.** Applications will be accepted through March 31, 1987.

For further information and application forms, please call 301-286-8319 (Ms. Arietta Love)

NASA

U.S. CITIZENSHIP REQUIRED
AN EQUAL OPPORTUNITY EMPLOYER

GSFC

POSITIONS OPEN

CLINICAL TOXICOLOGY/FACULTY: In anticipation of a new, campus-wide program in Clinical Toxicology, The University of Arkansas for Medical Sciences (UAMS) College of Pharmacy announces availability of a faculty position. Candidates must possess an earned Pharm.D. or Ph.D. degree. Although a postdoctoral research fellowship, or equivalent, is preferred, those having completed specialty residency training in clinical toxicology are considered eligible. Responsibilities will include contributing to the ongoing research program in toxicology, interacting with faculty and students in other colleges and departments, and clinical service to patients. Salary and rank are commensurate with experience. A joint appointment in another health-related department is anticipated. Pharmacy licensure in Arkansas is mandatory. **Dr. Bruce D. Clayton, UAMS, Slot 522, 4301 West Markham, Little Rock, AR 72205. Telephone: 501-661-5557.**

DENTAL EDUCATOR-ORAL MEDICINE. New York University College of Dentistry invites applications from licensed dentists for a full-time, tenure-track position in the Department of Oral Medicine. Applicants must have advanced training in either oral biology, oral medicine or pathology. Previous teaching experience and current research interests related to dentistry are desirable. Salary and academic rank will be commensurate with credentials and experience. Please submit curriculum vitae immediately to: **New York University Dental Center, College of Dentistry, 421 First Avenue, 1st Floor, New York, NY 10010. Attention: Dr. Barry R. Rifkin. New York University is an Equal Opportunity/Affirmative Action Employer.**

DEPARTMENT OF PATHOLOGY HENRY FORD HOSPITAL TUMOR IMMUNOLOGY AND CELL BIOLOGY

Two positions are available for directing laboratories of tumor immunology and cell biology. The candidates would be expected to collaborate with current programs in tumor immunology and cell biology and develop independent programs. The tumor immunology laboratory requires experience in antigen and antibody characterization and monoclonal antibody development. The cell biology laboratory requires experience in cell isolation, culture and characterization.

Ph.D. students and postdoctoral fellows are encouraged to apply. Applicants should forward curriculum vitae and references to:

Kenneth A. Greenawald, M.D., Ph.D.
Chairman, Department of Pathology
Henry Ford Hospital
2799 West Grand Boulevard
Detroit, MI 48202
Equal Opportunity Employer

Oregon Agricultural Experiment Station: Oregon State University invites nominations and applications for the position of **DIRECTOR OF OREGON AGRICULTURAL EXPERIMENT STATION AND ASSOCIATE DEAN, COLLEGE OF AGRICULTURAL SCIENCES.** The Director and Associate Dean administers and leads the statewide agricultural research programs carried out in eight colleges on campus, nine branch stations and in associated research centers. The Director is a key member of the college's administrative team, together with the Dean and the Directors of Extension, Academic Programs, and International Agriculture. Qualifications include a Ph.D. degree in agriculture or related discipline and experience in agricultural research and administration. The position is a 12-month, tenured appointment at the rank of professor. Salary will be commensurate with experience and qualifications. Position available 1 September 1987 or soon thereafter. Nominations due 6 April. Résumés and names of references from interested candidates due 15 April 1987. The search will be conducted confidentially. Letters of reference will be sought only with the knowledge and consent of top candidates following screening of professional résumés. For more information contact: **C. J. Weiser, Office of the Dean, College of Agricultural Sciences, Oregon State University, Corvallis, OR 97331-2212. Telephone: 503-754-2331.**

Oregon State University is an Affirmative Action/Equal Opportunity Employer and complies with Section 504 of the Rehabilitation Act of 1973. Women and minority candidates are especially encouraged to apply.

POSITIONS OPEN

DIRECTOR OF THE LABORATORY OF CLINICAL MICROBIOLOGY

The Wadsworth Center for Laboratories and Research is seeking a scientist-administrator to assume a leadership role in research and public health-related responsibilities in the area of clinical microbiology. The professional staff in these laboratories encompasses disciplines of bacteriology, mycology, parasitology, diagnostic immunology, virology, mycobacteriology, and related areas. We are seeking an individual with in-depth experience and interest in clinical areas related to these disciplines together with an interest in epidemiology. This is a senior level position with significant administrative responsibilities and expectation for leadership in program development related to public health problems and policy. Specific research activities are expected and encouraged. Applicants must have a Ph.D. or M.D. with relevant clinical laboratory and research experience with proven ability to assume administrative responsibilities.

Please send curriculum vitae and the names of three references to: **Felix H. Heilpern, Wadsworth Center for Laboratories and Research, Empire State Plaza, Albany, NY 12201. An Affirmative Action/Equal Opportunity Employer.**

The Hormel Institute of the University of Minnesota invites applications and nominations for the position of **EXECUTIVE DIRECTOR.** The Hormel Institute is located in Austin, Minnesota. The executive director is responsible for overall administration of an institute with 80 to 90 employees, including 8 to 10 of whom have academic rank. Candidates for this position should be recognized authorities in the fields related to lipid research and should have at least 8 years of research experience in the field. The director is expected to maintain an active research program. In addition to pursuing individual grant support, the director actively solicits and administers external support for institute-wide research activities. Closing date for receipt of nominations and applications is 24 March 1987. Send curriculum vitae and names of three referees to: **Dr. Michael C. Flickinger (Chair, Search Committee), Institute for Advanced Studies in Biological Process Technology, 240 Gortner Laboratory, University of Minnesota, 1479 Gortner Avenue, St. Paul, MN 55108. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites applications from women and minorities.**

FACULTY POSITION: PHARMACEUTICAL SCIENCES UNIVERSITY OF SOUTHERN CALIFORNIA (USC). Applications are invited for a tenure-track **ASSISTANT PROFESSOR** position at the University of Southern California, School of Pharmacy. Outstanding candidates with research interests in drug metabolism, pharmacokinetics, or pharmacodynamics are sought to complement our strong multidisciplinary programs in drug targeting, pharmacokinetics, and cancer pharmacology. Responsibilities include participation in team teaching in graduate and professional programs. Please submit curriculum vitae, statement of research objectives and the names of three references by 30 March 1987 to: **Jordan L. Cohen, Ph.D., USC School of Pharmacy, 1985 Zonal Avenue, Los Angeles, CA 90033-1086.**

Equal Opportunity Employer M/F/H.

FACULTY POSITION UNIVERSITY OF WISCONSIN-MADISON ENTOMOLOGY/ECOLOGY

The Department of Entomology, University of Wisconsin, Madison, is accepting applications to fill a full-time, tenure-track, research/teaching position in insect ecology. Ph.D. in entomology or related biological sciences required with primary experience in biology and ecology and a strong secondary background in either biochemical or quantitative approaches expected. Responsible for developing a vigorous research program and teaching courses in insect ecology and related areas. Opportunities exist for interacting with mission-oriented research and extension programs. Available 1 July 1987. Submit application materials by 13 March 1987, including a detailed résumé, transcripts and most significant reprints. Three letters of reference should also be sent to: **J. A. Wyman, Department of Entomology, 237 Russell Laboratories, University of Wisconsin, Madison, WI 53706.**

POSITIONS OPEN

FACULTY POSITIONS IN MOLECULAR VIROLOGY AND MOLECULAR IMMUNOLOGY

Two tenure-track positions at **ASSISTANT/ASSOCIATE PROFESSOR** levels in an expanding department that emphasizes research and graduate student training in virology, immunology, and pathogenesis. Prefer candidates with research expertise in (i) molecular biology of RNA viruses, retroviruses, AIDS, or oncogenes, or (ii) molecular immunology, immunogenetics, immunoregulation, and so forth. Candidates with expertise in other areas of virology or immunology will be considered. Successful candidates will develop an active research program, direct graduate students, and participate in teaching graduate and medical students. Competitive salary, generous seed funds, and technical support provided in a well-equipped department. Send curriculum vitae, statement of research interests, and names of three references to:

Dr. Dennis J. O'Callaghan
Professor and Head
Department of Microbiology and Immunology
Louisiana State University (LSU) Medical Center
P.O. Box 33932
Shreveport, LA 71130
LSU is an Affirmative Action/Equal Opportunity Employer.

HERPETOLOGIST/ VERTEBRATE ZOOLOGIST AUBURN UNIVERSITY

Applications are invited for an assistant or associate professor tenure-track position to begin in September 1987. Candidates should have Ph.D. in biological science with emphasis in herpetology, evidence of potential teaching excellence, and demonstrated accomplishments in a field-oriented research program. Responsibilities will include teaching courses in natural history of vertebrates and herpetology, developing a research program in herpetology, directing graduate students, and curating the departmental herpetological collection. Women and minorities are encouraged to apply. Interested persons should send curriculum vitae, transcripts, reprints, names of five references, and a description of research plans by 15 March 1987 to: **Dr. John Pritchett, Head, Department of Zoology and Wildlife Science, 331 Funchess Hall, Auburn University, AL 36849-4201. An Equal Opportunity/Affirmative Action Employer.**

IMMUNOLOGIST/NEUROBIOLOGIST

ASSISTANT PROFESSOR IN BIOLOGY. One tenure-track position available September 1987 in either immunology or neurobiology. Either requires development of a laboratory course. Neurobiologist would also participate in teaching animal physiology. Responsibilities may include involvement in introductory biology and nonmajor's courses. Strong commitment to undergraduate education and an active research program that involves undergraduates are required. Letter of application, curriculum vitae, most recent reprint, and three letters of reference by 27 February 1987 to: **Dr. Douglas F. Fraser, Department of Biology, Siena College, Loudonville, NY 12211.**

MARINE INVERTEBRATES/BEHAVIOR—Ph.D. for 1-year position to teach courses in the applicant's area of expertise and participate in teaching introductory level biology. Letter of application, résumé, and three letters of reference to: **Invertebrate Search Committee, Biology Department, Bates College, Lewiston, ME 04240** by 6 March 1987. *Bates College is an Equal Opportunity Employer. Minorities and women are encouraged to apply.*

MICROBIAL BIOCHEMIST FACULTY POSITION. Outstanding individual with commitment to research and teaching on biodegradation of organic contaminants sought. Successful candidate will develop a vigorous research program in microbial degradation (i) as part of an expanding interdisciplinary, environmentally oriented department; and (ii) in cooperation with a parallel effort in the Department of Chemical and Biological Sciences. Appointment at assistant professor level or higher. Ph.D. required. Send curriculum vitae, one-page statement of research interests, and names, addresses, and phone numbers of three references to: **Dr. J. F. Pankow, Department of Environmental Science and Engineering, Oregon Graduate Center, 19600 NW Von Neumann Drive, Beaverton, OR 97006.** Closing date: 15 April 1987. *Equal Opportunity Employer.*

**POSTDOCTORAL
FELLOWSHIPS**
INSTITUT NATIONAL
DE LA RECHERCHE SCIENTIFIQUE
(INRS-EAU) UNIVERSITÉ DU QUÉBEC

INRS offers each year a limited number of institutional postdoctoral fellowships (\$22,000+); the deadline for the 1987-88 competition is 17 April 1987. Such positions are available at INRS-Eau, a multi-disciplinary water research centre, within the research group studying the biogeochemistry of metals in the aquatic environment. Current research topics include metal speciation (dissolved and particulate forms), exchange processes at the sediment-water interface, metal-phytoplankton interactions, and metal bioaccumulation by benthic organisms. Applicants with a recent PhD in such fields as analytical chemistry, geochemistry, biochemistry or toxicology should send their curriculum vitae to Dr. P.G.C. Campbell, Dr. R. Carignan or Dr. A. Tessier, Université du Québec, INRS-Eau, C.P. 7500, Ste-Foy, Québec, Canada G1V 4C7 (tel. 418-654-2524).



Université du Québec
Institut national de la
recherche scientifique

Biotechnology/Pharmaceutical

We Said NO. So You Could Say YES!

IGEN, INC. turned down a major pharmaceutical firm's offer to purchase us because we believe IGEN can become one of the major diagnostics and pharmaceuticals companies of the future. If you have experience or work for companies such as Abbott, American Hospital Supply, Becton-Dickinson, Bristol-Meyers, Ciba-Geigy, Dupont, Eli Lilly, Hoffmann-La Roche, Johnson and Johnson, Merck Sharp and Dohme, Pfizer, or Schering-Plough and are ready for the challenge and excitement of building a major company, contact IGEN, INC.

VICE-PRESIDENT OF ENGINEERING

Our progressive management team is seeking a self-directed individual with 5 to 10 years of experience, enhanced by effective written, verbal and interpersonal skills.

The high level executive selected will have a strong background in electronics, optics, and robotics and will have demonstrated success in the areas of instrumentation process, from research units through prototypes to manufacturing readiness, and in working with outside instrumentation groups.

IGEN, INC. welcomes discussions of these opportunities with curious qualified candidates who may not be currently exploring employment alternatives. Call in confidence to our Director of Human Resources at (301) 984-7964, or send your resume with salary history in confidence to: **IGEN, INC., Department SN-23, 1530 East Jefferson Street, Rockville, Maryland 20852.**

IGEN, INC.

***An Emerging Leader
in Biotechnology***

An Equal Opportunity Employer

CHAIRPERSON Department of Anatomy and Cell Biology

The State University of New York Health Science Center at Brooklyn is seeking a new Chair for the Department of Anatomy & Cell Biology. The Health Science Center (formerly Downstate Medical Center), includes one of the largest medical schools in the nation. The department has 23 state-funded, tenure-track faculty lines, of which 8 are vacant, and 21 state-funded support staff. The department is well-funded with a core of productive young faculty with research interests in cell biology and neuroscience. In addition to courses in Gross Anatomy, Neuroanatomy and Cell Biology/Histology, there are active PhD, MD-PhD and post-doctoral training programs. The institution is prepared to make a major investment in recruitment and development of faculty. This is an opportunity to lead a department of excellence. Submit nominations or applications to: **Dr. Thomas C. Detwiler, Chairman, Anatomy and Cell Biology Search Committee, Box 8, SUNY Health Science Center at Brooklyn, 450 Clarkson Avenue, Brooklyn, NY 11203.**



UNIVERSITY HOSPITAL
State University of New York
HEALTH SCIENCE CENTER
AT BROOKLYN

EO/AA Employer, DMC #C-0056.

POSITIONS OPEN

MICROBIAL ECOLOGIST. Postdoctoral position for at least one year, available immediately. Biological control-oriented, interdisciplinary project involves isolation, identification and determination of the ecological role of microbial colonists of aquatic weeds. Experience in microbial ecology, bacteriology, mycology, or plant pathology. Send résumé, transcripts, and names, addresses and telephone numbers of at least three references to: **Dr. R. F. Harris, Department of Soil Science, University of Wisconsin, Madison, WI 53706. An Equal Opportunity Employer.**

MOLECULAR BIOLOGISTS/BIOCHEMISTS

SOMATOGENETICS INTERNATIONAL has immediate openings for creative individuals with Ph.D. degrees (or the equivalent) in chemistry, microbiology or biochemistry. Successful candidates should have expertise in recombinant DNA techniques (including DNA sequence analysis, site-specific mutagenesis and overproduction of foreign proteins) and/or in protein purification and modification techniques. He or she must be independent, interactive, and have the desire to supervise others in the production of novel chemical products. We offer competitive salaries commensurate with experience and productivity, an attractive benefit program, and links to a stimulating academic environment. Please send curriculum vitae, names of three references, and salary requirements in confidence to:

Somatogenetics International, Inc.
350 Interlocken Parkway
Suite 100
Broomfield, CO 80020

SOMATOGEN

MOLECULAR AND CELLULAR BIOLOGY OF LIPOPROTEINS AND APOPROTEINS. Applications for a 1- to 3-year postdoctoral appointment are invited from Ph.D. or M.D. graduates who have strong backgrounds in protein biochemistry and/or cellular immunology. Research problem: regulation of early events in lymphocyte activation and proliferation. Stipend: \$16,000 minimum; increases with relevant experience. Send a current curriculum vitae, representative publications, and the names of three references to:

J. A. K. Harmony, Director
Division of Lipoprotein Research
Department of Pharmacology and Cell Biophysics
College of Medicine
University of Cincinnati
Cincinnati, OH 45267-0575
Deadline: 1 March 1987.

A position is available for a **PHARMACOKINETICIST** or for an **ENGINEER OR PHYSICIST** interested in starting a career in biomedical science. It concerns the noninvasive measurement of fluorescent substances through the eye tissue and relating their diffusional to their chemical properties. There will be opportunities for collaborating on other problems concerning the physical properties of the eye that arise in the laboratory. Apart from the computing skills required in the treatment of the main problem, it would be an advantage to have training or experience in physical chemistry, optics, and electronics. Contact: **Dr. D. Maurice, S030, Stanford University Medical Center, Stanford, CA 94305. Stanford University is an Equal Opportunity/Affirmative Action Employer.**

Ph.D. PROGRAM IN PHYSIOLOGY at Louisiana State University Medical Center (LSUMC) in New Orleans offers training in: shock and trauma, endocrinology and metabolism, lipoproteins, neurophysiology, and cardiopulmonary and exercise physiology. Fellowships including free tuition and \$8000 per year are available. For complete description and application materials write to: **Dr. J. R. Porter, Department of Physiology, LSUMC, 1100 Florida Avenue, New Orleans, LA 70119. Telephone 504-948-8541. LSUMC is an Equal Opportunity/Affirmative Action Employer.**

PHYSIOLOGIST, CARDIOVASCULAR, needed to fill a tenure-track assistant professorship. Teaching proficiency essential. Send enquiries and applications to: **D. F. Magee, Creighton University Medical School, Omaha, NE 68178.**

POSITIONS OPEN

NEUROSCIENCE FACULTY

The University of California San Francisco (UCSF) Departments of Otolaryngology and Physiology are searching for a candidate whose primary research interest is in the organization and function of the vertebrate central nervous system for a tenure-track appointment at a junior or senior level. Applicants with a background in human and/or animal studies in the hearing and speech sciences are sought. The successful candidate will conduct an independent research program as well as take part in teaching and in the intellectual life of the Departments and the interdepartmental Neuroscience and Communicative-Neurosciences Training Programs. Applications from women and under-represented minorities are particularly encouraged. Applicants should promptly send curriculum vitae, statement of research interests, and the names and addresses and telephone numbers of three individuals from whom we may solicit letters of recommendation to:

Dr. Michael M. Merzenich
Search Committee

Department of Otolaryngology, HSE-871
University of California
San Francisco, CA 94143-0526

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

NMR IMAGING PHYSICIST

The Department of Radiology of the The Johns Hopkins University School of Medicine is seeking candidates to fill a tenure-track faculty position in NMR imaging. This position will emphasize clinical and research applications of NMR imaging and spectroscopy. Title, salary, and responsibilities of the candidate will be commensurate with his or her qualifications and experience. Available instrumentation includes 1.5 T, 4.7 T, and 8.5 T systems, and vigorous pursuit of research and instrumentation development will be encouraged. Excellent opportunities exist for collaboration with physicians, biomedical scientists, and spectroscopists. Interested individuals should send a description of their research interests, curriculum vitae, and three letters of recommendation to: **Martin V. Donner, M.D., Professor and Chairman, Department of Radiology and Radiological Science, The Johns Hopkins Hospital, Baltimore, MD 21205.**

POSTDOCTORAL ASSOCIATE: Develop new synthetic methods for di- and trisaccharides with β -glycosidic linkages leading to antitumor antibiotics. Perform isolation and purification methods using LC, radial and flash chromatography. Perform instrumental analysis using IR, GC, FT-NMR, and MS. Knowledge in synthesis of polyoxygenated antibiotics and α -mannosidase inhibitors. Ph.D. in chemistry and 1 year of experience required; 40 hours per week, 9:00 to 5:00, \$19,000 per year. Send resume to: **Professor Franck, Hunter College of the City University of New York, Department of Chemistry, 695 Park Avenue, New York, NY 10021.**

POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE POSITIONS AVAILABLE in the area of regulation of gene expression in the exocrine pancreas, including protein-DNA and protein-RNA interactions in the differential regulation of gene transcription and mRNA translation. Candidates should have Ph.D. degree and experience in genetic engineering and protein and nucleic acid biochemistry. Applications including curriculum vitae, bibliography, one letter of reference, and names of two additional references should be sent to: **Dr. George Scheele, Laboratory of Cell and Molecular Biology, The Rockefeller University, New York, NY 10021.**

A NATIONAL SCIENCE FOUNDATION ENVIRONMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEARCH FUNDED POSTDOCTORAL POSITION is available immediately for work on differential gene expression in cellular salt tolerance of plant cells in culture. Candidates must have a recent Ph.D. and experience in molecular biology and recombinant DNA technology. Send a current résumé and three letters of reference to: **Dr. Ilga Winicov, Department of Biochemistry, Howard Medical Sciences Building, University of Nevada Reno, Reno, NV 89557. Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

MICROBIAL GENETICS: The Biology Department, Gonzaga University, invites applications for a tenure-track (**ASSISTANT PROFESSOR, Ph.D.**) position available September 1987. Applicants should have a strong commitment to both teaching and research in a small department setting. Teaching responsibilities include microbiology and genetics as well as other courses in the biology curriculum consistent with the applicant's training and interests. The applicant is also expected to develop and maintain a research program involving interaction with undergraduate students. Gonzaga University is a selective, coeducational, Jesuit institution located in the Pacific Northwest. Send curriculum vitae, transcripts, description of research program and three letters of recommendation by 15 March 1987 to: **R. D. Prusch, Biology Department, Gonzaga University, Spokane, WA 99258. An Equal Opportunity Employer.**

PEDIATRIC GENETIC PROFESSORSHIP

The Department of Pediatrics of the University of Arizona Medical Center is seeking a faculty member to fill an Endowed Professorship in Genetics and Inherited Diseases. Qualifications may include (i) M.D. and/or Ph.D. or (ii) actively established research program that can interface with and enlarge present research in molecular or biochemical genetics. *The University of Arizona is an Equal Opportunity/Affirmative Action Employer.* All inquiries should be addressed to: **Otakar Koldovsky, M.D., Ph.D., Professor, Pediatrics, Department of Pediatrics, University Medical Center, 1501 North Campbell, Tucson, AZ 85724; telephone: 602-626-6626.**

Closing date is 30 June 1987 or until position is filled.

POSTDOCTORAL POSITION available immediately in the areas of protein engineering and structure-function relationships using multidisciplinary approach: recombinant DNA technology (site-directed mutagenesis), protein chemistry/biochemistry, computer-aided molecular modeling, biophysical methods (spectroscopy). Ph.D. with strong background in minimum one of these areas required. Current research involves: (i) genetic engineering of new proteins; (ii) dynamics of protein structure. Contact: **Dr. Maria T. Mas, Beckman Research Institute of the City of Hope, Division of Biology, 1450 East Duarte Road, Duarte, CA 91010; telephone: 818-357-9711, extension 2432.**

POSTDOCTORAL POSITION presently available for cellular immunologist to work on T-cell regulation of mouse IgA responses. Opportunity to prepare and work with T-cell clones and hybridomas. Applicant must be U.S. citizen, permanent resident or non-citizen national, eligible for NIH stipend support at a level from 0 to 5 years postdoctoral. Submit curriculum vitae and the names, addresses and telephone numbers of three references to: **Dr. Julia M. Phillips-Quagliata, Department of Pathology, New York University Medical Center, 550 First Avenue, New York, NY 10016.**

POSTDOCTORAL POSITION

Postdoctoral position available immediately to study the biochemical basis of information processing in the mammalian auditory nervous system. Project includes (i) biochemistry and measurement of transmitter synthesis, storage, release, and inactivation in auditory pathways, and (ii) light microscopic localization of cell groups using particular transmitters with histological and radioautographic methods. Possibility for collaboration with interdisciplinary neuroscience group. Ideal for recent Ph.D. in neuroscience, biochemistry, or pharmacology. Salary depends on experience. Send résumé, summary of research interests, and names of three references to: **Dr. Steven J. Potashner, Department of Anatomy, University of Connecticut Health Center, Farmington, CT 06032.**

An Affirmative Action/Equal Opportunity Employer M/W/H.

POSTDOCTORAL POSITION available immediately to investigate control of peripheral vascular function and sex differences in vascular physiology in humans. Ph.D. or M.D. with experience in cardiovascular physiology or pharmacology. Please send curriculum vitae, reprints and names of three references to: **Robert Freedman, Ph.D., Director, Behavioral Medicine Laboratory, Wayne State University School of Medicine, Lafayette Clinic, 951 East Lafayette, Detroit, MI 48207. (Please note address change.)**

Senior Research Technicians

Molecular Genetics, Inc., a leading biotechnology company, has two positions open at the Senior Research Technician level:

Research Entomologist

Applicants should hold an M.S. or B.S. with a minimum of 3 years research experience beyond the degree.

Qualified applicants must have either 1) an entomology degree with biochemistry or chemistry experience or 2) a biochemistry or chemistry degree with a background in insect biology. Experience with insect rearing and bioassays, and familiarity with statistical analysis is desirable.

Immunologist

Applicants should hold an M.S. or B.S. in immunology or a related field with 3 years of research experience beyond the degree. Qualified applicants must be proficient in serologic techniques including EIA, Western Blot, conjugate preparation and antigen quantitation. Preference will be given to candidates having experience with enteric delivery systems and/or a pharmacology background.

Molecular Genetics, Inc. offers a competitive salary and benefits package and a stimulating multidisciplinary research environment. Applicants should state the position of interest and submit a resume and list of three references to: **Human Resources, Molecular Genetics, Inc., 10320 Bren Road East, Minnetonka, MN 55343.** An Equal Opportunity/Affirmative Action Employer

Information Scientist Literature Searcher

The Agricultural Research Division of American Cyanamid Company has an immediate need for an individual whose responsibilities will include search, retrieval and evaluation of published and unpublished R&D information related to current laboratory and field work, and company products. Comprehensive literature research reports will be prepared based on manual and computer services.

Candidates with an advanced degree in biotechnology, biological sciences or chemistry, and computer searching experience will receive preferential consideration. Laboratory experience is desirable.

We offer competitive compensation, comprehensive benefits and a professional, growth-oriented environment.

Please forward your resume, with salary requirements, in confidence to Judith C. Leondar, Manager, Technical Information Services.



American Cyanamid Company
Agricultural Research Division
P.O. Box 400
Princeton, NJ 08540
An Equal Opportunity Employer M/F/H
No Agencies Please

THE PENNSYLVANIA STATE UNIVERSITY

DEAN College of Engineering

Applications and nominations are invited for the position of Dean of the College of Engineering. Candidates should have credentials to merit appointment as a tenured faculty member in the College; experience in teaching and research in an academic environment; leadership ability; demonstrated administrative and managerial skills; and fund raising experience.

The College of Engineering offers undergraduate and graduate programs in 11 majors in addition to two-year associate degree programs in 14 areas of engineering technology. The College currently enrolls 5,050 baccalaureate, 650 graduate, and 1,400 associate degree students. There are 256 FTE faculty positions at the University Park Campus and 125 at the Commonwealth Campuses. The budget for 1985-86, including research, is over \$30 million.

The Search Committee will begin to review applications in February and continue to receive them until a candidate is selected. Nominations and letters of application, accompanied by a curriculum vitae and other supporting materials, should be mailed to:

Chair, Engineering Dean Search
The Pennsylvania State University
c/o Office of the President
Room 201, Old Main, Box-SCI
University Park, PA 16802

The Pennsylvania State University
is an Affirmative Action, Equal
Opportunity Employer.

Amgen, an industry leader in biotechnology, is developing products for human therapeutics, diagnostics, animal health care and specialty chemicals. Continued progress in product development has created the following immediate opportunities in our Clinical Research Group.

CLINICAL PROJECT MANAGER

Requires a Ph.D. or M.D. and at least 2 years of relevant clinical research experience in the pharmaceutical industry or a Master's degree in the sciences with a minimum of 6 years of relevant clinical research experience. Previous management experience, excellent communication and presentation skills as well as a willingness to travel are essential. **Dept. 115**

CLINICAL RESEARCH MONITOR

Participate in the monitoring and auditing of clinical, toxicological, and preclinical studies. Qualified applicants should possess a Bachelor's degree in the sciences and have a minimum of 1 year of clinical monitoring experience with drugs or biologics. Proficiency in communication skills as well as a willingness to travel are essential. Computer skills with common software packages are desirable. **Dept. 116**

Amgen provides a stimulating and challenging work environment as well as an attractive location, one hour northwest of Los Angeles. Amgen also offers an excellent compensation and benefits package to its employees.

Qualified applicants should send a resume in confidence to:

Recruitment, Specify Dept. #
AMGEN
1900 Oak Terrace Lane
Thousand Oaks,
CA 91320

Equal Opportunity Employer



POSITIONS OPEN

MOLECULAR BIOLOGIST. Associate Professor—Professor, Ph.D., M.D. or M.D., Ph.D. with national funding and expertise in molecular biology of human oncogenic viruses to develop research and teaching programs. Send curriculum vitae and three references to: **David T. Purtilo, M.D., Chairman, Pathology and Microbiology, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, NE 68105. An Equal Opportunity/Affirmative Action Employer.**

MOLECULAR BIOLOGIST. Instructor—Assistant Professor, Ph.D., M.D. or M.D., Ph.D. with potential for establishing NIH-funded molecular biology laboratory. Facilities and support are excellent. Send curriculum vitae and three references to: **David T. Purtilo, M.D., Chairman, Pathology and Microbiology, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, NE 68105. An Equal Opportunity/Affirmative Action Employer.**

PHYSIOLOGY AND BIOPHYSICS. The University of Southern California School (USC) of Medicine offer a research tract appointment as **ASSISTANT PROFESSOR** (non-tenure) in the Department of Physiology and Biophysics. The candidate will participate in a vision research program and must have experience involving the special techniques of intracellular recording and staining in vertebrate and invertebrate eyes. Areas of special interest include cell tracers, cellular communication and circuitry. Send résumé and letters of reference to: **Stephen J. Ryan, M.D., Professor and Chairman, USC Ophthalmology, Doheny Eye Foundation, 1355 San Pablo Street, Los Angeles, CA 90033. Equal Opportunity/Affirmative Action Employer.**

NSF POSTDOCTORAL POSITION is available immediately with support guaranteed for 2 years. The project concerns the mechanisms for anoxic brain survival in the turtle. Studies to be undertaken include metabolite (HPLC, NMR), ion pump and electrical activity of active anoxic brain tissues.

Send letter of application and the names of three referees to:

Dr. Peter Lutz
Division of Biology and Living Resources
Rosenstiel School of Marine
and Atmospheric Science
4600 Rickenbacker Causeway
Miami, FL 33149
Telephone: 305-361-4176

POSTDOCTORAL POSITION. For work on analysis of the alcohol dehydrogenase gene structure in evolution of Hawaiian *Drosophila*. Ph.D. in biology, genetics, or biochemistry; experience with recombinant DNA technology and *Drosophila* chromosome preparation desirable. Available from 1 May 1987. Send résumé and three references by 31 March 1987 to: **Dr. John A. Hunt, Genetics Department, University of Hawaii, Honolulu, HI 96822. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION available—recent Ph.D. in biology/molecular biology to study role of cytochrome P450 in arachidonic acid metabolites and effects of drugs and hormones on gene expression/activation. Experience in mammalian cell culture required. Salary commensurate with experience. Send curriculum vitae and names of two references to: **Dr. John C. McGiff, Department of Pharmacology, New York Medical College, Valhalla, NY 10595.**

POSTDOCTORAL POSITIONS available—(i) recent Ph.D. or M.D. with training in molecular biology to work with identification/regulation of gene activities of leukemia cells—focus on molecular mechanisms involved in differentiation growth factors and regulators. (ii) Ph.D. in biology/molecular biology to study role of oncogene activation/expression in clinical carcinogenesis. Multidisciplinary program with immunology, cell biology, pharmacology, oncology. Salary commensurate with experience. Send curriculum vitae and names of two references to either: **Dr. John C. McGiff or Dr. N. G. Abraham, Department of Pharmacology, New York Medical College, Valhalla, NY 10595.**

POSTDOCTORAL POSITION for research on transgenic animals. Work includes microinjection of genes into eggs, embryo transfer and development of transgenic mouse lines expressing new gene constructions. Apply with curriculum vitae to: **Dr. R. L. Brinster, University of Pennsylvania, Philadelphia, PA 19104.**

POSITIONS OPEN

POSTDOCTORAL NEUROPHYSIOLOGIST to study information-specific cell firing and cognitive evoked potentials to words and faces in the human and monkey hippocampus. 1 April 1987 to 31 March 1989. Salary about \$20,000 per year. Send curriculum vitae, one (p)reprint and names of three references to: **F. Halgren, BRI 73-364 CHS, University of California at Los Angeles (UCLA), Los Angeles, CA 90024.**

SLOAN-KETTERING INSTITUTE

A **POSTDOCTORAL POSITION** is available for a **BIOCHEMIST/MOLECULAR BIOLOGIST** to study the biochemistry and molecular genetics of cell surface molecules involved in control of lymphocyte differentiation and activation. Ongoing projects include protein purification and characterization, gene cloning, sequencing, and expression. A major project relates to the Ly-6 multigene family. A strong grasp of techniques in nucleic acid and/or protein biochemistry is required. Send curriculum vitae, summary of research experience, and names of references to: **Dr. Ulrich Hammerling, Department of Immunochimistry, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. Sloan-Kettering is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION is available immediately to study the regulation of drug-metabolizing enzymes in mammalian cells by environmentally derived toxins. Applicants with a Ph.D. in biochemistry or pharmacology with experience in biochemical toxicology are sought. Candidates should send curriculum vitae and a brief statement of research experience to: **Dr. Alvaro Alvares, c/o Civilian Personnel, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, MD 20814-4799.**

POSTDOCTORAL POSITION IN AIDS IMMUNOLOGY available now to study mechanisms of cellular immunity to AIDS virus using recombinant HIV proteins and synthetic peptides to analyze protective mechanisms and autoimmune phenomena using cloned suppressor-cytotoxic and helper T cells. Background in cellular immunology essential. Molecular biology or peptide chemistry experience desirable. Send curriculum vitae and names of three references to: **Daniel Stites, M.D., Immunology-Laboratory Medicine, Box 0100, University of California, San Francisco, CA 94143.**

POSTDOCTORAL POSITION

Position available to study the structural and functional domains of proteins specified by herpes simplex virus and human cytomegalovirus. Preference will be given to applicants with a strong background in molecular biology. Interested candidates should submit curriculum vitae and three letters of reference to: **Dr. Lenore Pereira, School of Dentistry, Division of Oral Biology, University of California, San Francisco, HSW-604, San Francisco, CA 94143. The University of California is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION

Available immediately to join a group studying the structure, regulation, and physiological functions of protein phosphatases. The project will involve (i) determining the structure of the protein phosphatase inhibitor-1 gene and (ii) using site-directed mutagenesis to study structure/function relationships of the inhibitor-1 protein. Inhibitor-1 is a heat-stable protein involved in the regulation of protein phosphatase 1 by cAMP and calcium ions. Applicants should have a strong background in recombinant DNA technology. Salary: \$23,000. Send curriculum vitae, statement of research interests, and names of three references to: **Dr. Thomas S. Ingebritsen, Department of Zoology, Iowa State University, Ames, IA 50011-3223.**

POSTDOCTORAL POSITION for cell/developmental biologist to study tissue interactions involved in connective tissue differentiation during craniofacial and limb development. Biochemical molecular or immunological training preferred. Send résumé and three references to: **Dr. Michael Solursh, Department of Biology, University of Iowa, Iowa City, IA 52242. The University of Iowa is an Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITION available to study motility and architectural alterations during fertilization and early embryogenesis. Send curriculum vitae, reprints, and names of three references to:

Dr. Gerald Schatten
Integrated Microscopy Facility
for Biomedical Research
Zoology Research Building
University of Wisconsin
1117 West Johnson Street
Madison, WI 53706

POSTDOCTORAL POSITIONS available for both molecular and animal studies on the Simian Immunodeficiency Virus. Candidates should have experience and/or interests in either of the following areas: molecular genetics, molecular biology and site-specific mutagenesis in retrovirus systems; experimental infection of animals with viruses, including approaches to vaccination and mechanisms of pathogenesis. Candidates should have a Ph.D. or D.V.M. degree. Send curriculum vitae including publications and names of references to: **Dr. Ronald C. Desrosiers, New England Regional Primate Research Center, Harvard Medical School, Southborough, MA 01772.**

POSTDOCTORAL POSITIONS available immediately to work in the areas of genetic basis of carcinogenesis and comparative gene mapping. Use is made of somatic cell genetics and molecular biology techniques. Candidates should have a Ph.D. in cellular biology, biochemistry, or genetics, with experience in recombinant DNA technology.

The Institute for Medical Research is a private, not-for-profit basic medical research institute located in southwestern Vermont with easy access to Albany, NY, New York City, and Boston, MA.

Send curriculum vitae and the names and addresses of three references to: **Dr. Peter A. Lalley, Director, Institute for Medical Research, 110 Hospital Drive, Bennington, VT 05201. The Institute is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS are available in three research areas: (i) the molecular biology of gene regulation, high frequency transposition and developmental timing in *Dictyostelium*, (ii) the regulation of cell motility and chemotaxis at the behavioral and molecular level in *Dictyostelium*, or (iii) the molecular biology of genetic transposition and high frequency phenotypic switching in *Candida albicans*. Send curriculum vitae and names of two references to: **Dr. David R. Soll, Department of Biology, University of Iowa, Iowa City, IA 52242. The University of Iowa is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITIONS—EXPERIMENTAL HEMATOLOGY. The Hematology Division of The Johns Hopkins University School of Medicine has a position available now for an individual with an M.D. or Ph.D. degree and an interest in experimental hematology (erythropoietin, regulation of hematopoiesis). U.S. citizenship required. Send curriculum vitae and three references to: **J. L. Spivak, M.D., Hematology Division, The Johns Hopkins Hospital, Baltimore, MD 21205. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL OR RESEARCH ASSOCIATE positions immediately available for training in immunochimistry and molecular immunology. A molecular approach will be used to examine structure and regulation of immunoglobulin V-region genes in two model systems, anti-carbohydrate (**Dr. Marcus**) and anti-protein (**Dr. Thomas**). An exciting academic environment and opportunity for advancement is available. Experience in recombinant DNA techniques is preferred. Send curriculum vitae and names of two references to: **Dr. James Thomas, Department of Medicine, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030.**

POSTDOCTORAL RESEARCH ASSOCIATE position available immediately to study the molecular biology and structure/function of the lymphocyte Fc receptor for IgE. Experience in molecular biology and membrane biochemistry highly desirable. Submit curriculum vitae and two letters of recommendation to: **Dr. Daniel H. Conrad, Subdepartment of Immunology, Johns Hopkins University, 725 North Wolfe Street, Baltimore, MD 21205. Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE position in neuroanatomy, available immediately for 2 years, extendable to 3.5 years. Project: optic-tract plasticity and regeneration in mammals. Candidates must be prepared to study single-axon morphology in developing and mature animals. Parallel studies include analysis of protein synthesis and use of molecular markers. Salary negotiable. Send curriculum vitae and names of three references to: Dr. G. E. Schneider, Massachusetts Institute of Technology (MIT), E25-634, Cambridge, MA 02139. *MIT is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL RESEARCH ASSOCIATE to study development of innervation of mammalian skeletal muscle fibers using electrophysiology and immunohistochemistry. Prior training in neurophysiology, cell biology, and/or biochemistry required. Send curriculum vitae together with the names of three references before 1 April 1987 to: Wesley Thompson, Ph.D., Department of Zoology, University of Texas, Austin, TX 78712.

POSTDOCTORAL RESEARCH POSITION GASTROINTESTINAL ONCOLOGY

Three-year position available immediately to Ph.D. in biochemistry, cell biology, or molecular biology to study new cancer chemopreventive agents with focus on gastrointestinal cancer. Applicants should have knowledge of animal models for carcinogenesis. Send curriculum vitae and names of three references to: Dr. Michael J. Wargovich, Section of Gastrointestinal Oncology and Digestive Diseases, Box 68, M. D. Anderson Hospital and Tumor Institute, Houston, TX 77030. *An Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL TRAINING IN PLANT MOLECULAR BIOLOGY MOLECULAR BIOLOGY, BIOCHEMISTRY, AND GENETICS

The Plant Gene Expression Center (PGEN) in Albany, California, sponsored by USDA's Agricultural Research Service and the University of California, Berkeley, invites applications for qualified candidates with Ph.D. degrees for ten postdoctoral positions. The PGEN is an interdisciplinary program designed to provide plant agriculture with the technology to maintain and enhance the quality and productivity of the agricultural product.

The PGEN programs include: auxin-regulated gene expression (A. Theologis); maize transposable elements (B. Baker); monocot transformation (M. Fromm); gene expression in transgenic plants (D. Ow); developmental mutants of maize (S. Hake); flower development (S. McCormick); and phytochrome regulation (P. Quail). Candidates should be familiar with molecular biology, biochemistry, or genetics. Salary is commensurate with experience with a range of \$22,000 to \$27,000. For information on the research program and/or positions, telephone: Gerald G. Still 415-486-3662. To obtain federal application forms, contact: Patricia Roberts 301-344-3138, USDA, Agricultural Research Service, Room 405, Building 003, BARC-W, Beltsville, MD 20705. *An Equal Opportunity Employer.*

The Basic Science Departments (Cell Biology and Neuroanatomy, Biochemistry, Microbiology, Pathology, Pharmacology, and Physiology), Medical School, University of Minnesota, periodically have openings for **POSTDOCTORAL TRAINING**. For information about possible openings in these programs, write, specifying department of interest, to:

University of Minnesota Medical School
Box 293 UMHC
420 Delaware Street SE
Minneapolis, MN 55455
Attention: James C. Nelson

The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.

POSTDOCTORATE 2-D NMR—To solve the solution structure of small (MW 6,000–10,000) proteins involved in blood coagulation phenomena. Facilities include Bruker 500, MSL 300, several 200, 300 MHz. Candidate should have experience in NMR of macromolecules. Available 1 March 1987. Please submit curriculum vitae, reprints, and three to four references to: Professor L. J. Berliner, Department of Chemistry, Ohio State University, 120 West 18 Avenue, Columbus, OH 43210; telephone: 614-292-0134.

13 FEBRUARY 1987

PRECLINICAL RESEARCH SCIENTISTS

Sandoz Pharmaceuticals Corporation is responsible for products that improve the quality of life. Our developments are the result of research conducted by professionals who specialize in many different fields. We currently have several outstanding opportunities in the Platelet Department for Scientists who will contribute to the discovery and development of novel mediator antagonists.

Senior Scientist— Biochemist

You will develop specialized receptor methodology, to conduct purification, characterization and ligand binding interactions with receptors. A strong background utilizing in vitro procedures of platelet testing, cellular responses to inflammatory mediators and knowledge of immunology is required. You should have a Ph.D. in biochemistry, immunology or an associated discipline, with at least 3 years' experience demonstrating a substantial record of publication and research accomplishment. #P-28.

Senior Scientist— Pulmonary Physiologist

You will participate in the pharmacological evaluation of new compounds in the prevention of autocoloid and antigen-induced bronchoconstriction. Position will entail in vivo assessment of lung mechanics, as well as analyses in various animal species, including primates. A Ph.D. in physiology, pharmacology or a related discipline is required, with 1-3 years' expertise in pulmonary physiology and surgical techniques. #P-29.

Postdoctoral— Research Fellow

You will develop in vivo approaches to diseases mediated by gram-negative sepsis, in such areas as gastrointestinal, ocular, and pulmonary. Knowledge of underlying mechanisms and mediators of endotoxemia, appropriate animal models and quantitation of therapeutic regimes is required. A Ph.D. in immunology, pathology or a related discipline, with 0-3 years' experience and a strong interest in publishing is essential. #P-30.

These positions at Sandoz offer excellent career opportunities, modern equipped research laboratories, professional challenge, competitive salaries and an excellent benefits package. A creative and innovative approach to research is encouraged. Our campus-like facilities are conveniently located in northern New Jersey.

Please send resume including position number you are applying for with salary requirements to:



Mr. Joseph P. Castellano
Director of Human Resources (403/1)
SANDOZ RESEARCH INSTITUTE
SANDOZ PHARMACEUTICALS
CORPORATION

East Hanover, New Jersey 07936
An Equal Opportunity Employer M/F

POSITIONS OPEN

POSTDOCTORAL/RESEARCH ASSOCIATE

Available as part of an NIH-supported project to examine the mechanisms responsible for T-cell specificity in patients with autoimmune disorders. Experience in cellular immunology and molecular biology helpful. Potential for advancement. Submit curriculum vitae and names of three references to: **Dr. Richard M. Pope, Northwestern University, Department of Medicine, 303a East Chicago Avenue, Chicago, IL 60611. Equal Opportunity Employer.**

OCEAN DRILLING PROGRAM PUBLIC INFORMATION ASSOCIATE

Joint Oceanographic Institutions (JOI) Inc. in Washington, DC, anticipates hiring a **PUBLIC INFORMATION ASSOCIATE** to plan and implement an international liaison and public information effort for the Ocean Drilling Program (ODP) with emphasis on the efforts of the non-U.S. partner nations and on increased participation of third world scientists in the ODP. Experience with international science programs and with print and visual media are required, as is mastery of English; background in geology or oceanography and knowledge of additional languages would be advantageous. Duties will include: liaison with non-U.S. partners; coordination with public information efforts of the science operator, Texas A&M University, and other subcontractors; development of films/videos, newsletters, brochures and displays; coordination of speakers and displays at international meetings; establishment of a newly approved program for increased involvement of third world scientists in the ODP; assistance in preparation of annual plans, budgets, monthly reports and other program documents. The incumbent will be based in Washington, DC. Moderate to extensive travel is anticipated.

Please send application and résumé, including names and phone numbers of three references to: **Dr. Thomas E. Pyle, Director of Ocean Drilling Program, Joint Oceanographic Institutions, Inc., 1755 Massachusetts Avenue, NW, Washington, DC 20036; telephone: 202-232-3900. Application deadline: 22 March 1987. JOI is an Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

RESEARCH ASSISTANT PROFESSOR: Applications are invited for a non tenure-track appointment at the assistant professor level in the division of organ transplantation. The opening is for an immunobiologist for transplantation tolerance experiments. The applicant must have 3 years of experience, including publications, knowledge of rat cardiac and splenic transplant methods, fractionation and participation of T-cell subjects, and lymphokine assays mandatory.

Submit application, including curriculum vitae and letters of recommendation, not later than 1 March 1987 to: **Barry Kahan, Ph.D., M.D., Professor and Chief, Division of Immunology and Organ Transplantation, University of Texas Health Science Center, 6431 Fannin, Houston, TX 77030. An Equal Opportunity Employer. Women and minorities are encouraged to apply.**

RESEARCH ASSISTANT MOLECULAR/CELL BIOLOGY

Immediate opening at **The Jackson Laboratory** located in Bar Harbor, ME adjacent to Acadia National Park. M.S. in biological sciences or equivalent laboratory experience required. Research will focus on the use of oligonucleotide-directed in vitro mutagenesis in the study of transforming gene (oncogene) function. Candidates with experience in plasmid manipulations, DNA sequence analysis, and cell culture techniques are especially encouraged to apply. Send curriculum vitae, transcripts, and references to: **Harold Wheeler, Employment Manager, The Jackson Laboratory, 600 Main Street, Bar Harbor, ME 04609. Telephone: 207-288-3371, extension 250. Affirmative Action/Equal Opportunity Employer.**

RESEARCH ASSOCIATE: Postdoctoral position to study effects of clearcutting on soil and drainage water. Strong background in soil and water chemistry, statistics and computer modeling, as well as demonstrated ability to conduct independent research. Submit curriculum vitae and three letters of reference by 15 March 1987 to: **Dr. Charles T. Driscoll, Department of Civil Engineering, 220 Hinds Hall, Syracuse University, Syracuse, NY 13210. Syracuse University is an Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

RESEARCH ASSISTANT—IMMUNOLOGY

The Jackson Laboratory, a nonprofit research institution located on the coast of Maine, has an immediate opening for a research assistant with an M.S. in the biological sciences or commensurate experience. This is an opportunity for active and original participation in a research program directed at (i) the role of lymphokines in lymphocyte development and function and (ii) defining the fundamental mechanisms and gene defects in murine models of immunodeficiency and autoimmunity.

Laboratory duties include DNA and RNA preps, Northern and Southern blotting, gene cloning in plasmids and phage, cell fractionation, and tissue culture. Experience in cDNA cloning and expression systems is particularly desired.

Please send curriculum vitae, transcripts, and letters of reference to: **Harold Wheeler, Employment Manager, The Jackson Laboratory, 600 Main Street, Bar Harbor, ME 04609. Telephone: 207-288-3371. Affirmative Action/Equal Opportunity Employer.**

RESEARCH ENVIRONMENTAL SCIENTIST/CHEMIST: The California Public Health Foundation (CPHF), Berkeley, California, invites applications for a research position to study atmospheric transport of and human exposure to chemicals released from waste management facilities. Applicants should have extensive experience in analytical chemistry and air sampling technology including instrumentation, calibration, and quality control. Competency in atmospheric dispersion modeling and other mathematical modeling techniques is desirable. Familiarity with hazardous waste/air pollution literature valuable. Publication record, communication skills and interest in collaboration essential. Candidates should have an advanced degree in chemistry or a related discipline. Salary: \$3,494 to \$4,224 per month, commensurate with qualifications and experience. Send résumé and names of three references to: **Penelope Ruhter, Acting Chief Executive Officer, California Public Health Foundation, P.O. Box 520, Berkeley, CA 94701. CPHF is an Equal Opportunity Employer.**

Drug Metabolism Research (BS/MS)

The Upjohn Company, a world-wide leader in research and development of pharmaceuticals, located in Kalamazoo, Michigan, has several associate position openings (BS or MS level) in its Drug Metabolism Research Group.

Biologist: As a member of a research team, plan and conduct absorption, excretion and metabolism studies with radioisotope-labeled drugs in animals; conduct radio-chemical analysis of resulting biological materials for drugs and metabolites; perform small animal surgeries, calculations, evaluations of results and report writing; and assist in training of technicians. The successful candidate must have a BS or MS degree in the biological sciences and at least 2 years of relevant experience. Background in conducting *in vivo* drug metabolism studies in animals is highly desirable. Position number is 20484-A.

Biochemist: Work semi-independently in the investigation of pharmacogenetic determinants responsible for inter-individual differences in drug efficacy and toxicity. This will include *in vitro* metabolism, isolation and quantitation of metabolites, enzyme kinetics and inhibition studies. *In vivo* and *in vitro* toxicity in animals and drug disposition studies in humans will also be performed. The successful candidate must have a BS or MS degree in the chemical or biological sciences, and at least 2 years of relevant experience. Training and background in conducting *in vivo* and *in vitro* drug metabolism studies, including a working knowledge of modern tools for separation and physio-chemical analyses (HPLC, GC, GC/MS, radiochemical techniques) are highly desirable. Position number is 20478-A.

Kalamazoo is a medium-sized Southwestern Michigan community with immediate access to a rich mix of cultural, educational and recreational pursuits including numerous lakes and a four-season climate. Upjohn offers the opportunity for career growth, a competitive salary commensurate with experience, a comprehensive benefits program and relocation assistance. For confidential consideration, please call from outside of Michigan toll free 1-800-253-8600, ext. 3-6767, (inside Michigan call collect 616-323-6767) to request an employment application be sent to you immediately. Please refer to one of the above position numbers when calling.

Upjohn

Our commitment to scientific excellence continues...

An Equal Opportunity Employer M/F

MOLECULAR VIROLOGIST

The Sterling Research Group, a division of Sterling Drug Inc., announces an opening at its Research Institute in Rensselaer, NY for a Senior Research Biologist in its Microbiology Department.

The successful candidate will possess a PhD degree in virology or molecular biology with 2-5 years relevant postdoctoral experience. Individuals working with HERPESVIRUSES or RETROVIRUSES, and with viral transcription, transient expression assays, or viral latency would be preferred. Supervision of other scientific staff is expected and strong interpersonal and communication skills are required.

Located near Albany, NY, we offer an attractive salary and benefits package as well as opportunities for professional development in a dynamic environment utilizing a team approach to Research and Development. Interested candidates should send curriculum vitae including salary requirements in confidence to:

Ms. Randy E. Goldfischer
Employee Relations Administrator



**STERLING-WINTHROP
RESEARCH INSTITUTE**

Sterling Research Group
A Division Sterling Drug Inc.
Columbia Turnpike, Rensselaer, NY 12144
Equal Opportunity Employer M/F/H/V

DEPUTY DIRECTOR FOR TECHNICAL OPERATIONS

The Princeton Plasma Physics Laboratory, one of the world's leading laboratories engaged in the development of magnetic fusion as an inexhaustible energy source, seeks a Deputy Director for Technical Operations who will be responsible for the Laboratory's major experimental projects—TFTR, PBX, and smaller machines—the proposed new CIT device, and the facilities and activities that support these projects.

The principal responsibilities of the Deputy Director will include the management of day-to-day technical operations in accordance with the Laboratory's research program, the construction and maintenance of experimental facilities, and the allocation of support facilities and personnel.

The essential qualifications for this position are broad experience in advanced technologies, and an international reputation for the successful management of large technical enterprises. Other requirements are familiarity with government operations and procedures, particularly those concerned with the support of scientific projects, and experience with the interactions of academic, industrial, and FFR&D institutions.

The Laboratory offers stimulating and challenging work, a salary fully commensurate with experience, and a comprehensive benefit package.

Please forward a detailed resume and salary requirements to:

Dr. Harold P. Furth, Director
Princeton Plasma Physics Laboratory
Post Office Box 451
Princeton, New Jersey 08544

An Equal Opportunity/Affirmative Action Employer

**Plasma Physics
Laboratory**
Princeton University

At Cetus Corporation, we are committed to maintaining our leading role in the research and development of biotechnology-based products.

We currently seek

RESEARCH ASSISTANTS/ASSOCIATES

to join our highly skilled staff in Emeryville and participate in a variety of challenging programs. Opportunities exist in the following areas:

MICROBIAL PHYSIOLOGY/ FERMENTATION/PROTEIN PURIFICATION

Successful candidates will conduct experiments in one of the following areas: microbial physiology; fermentation development; protein purification/characterization; or production of recombinant proteins, enzymes or chemicals. Positions require a BS/MS in microbiology, microbial physiology or biochemistry and relevant experience.

PROTEIN CHEMISTRY

Positions are available entailing purification and characterization of native proteins from mammalian cell supernatants, recombinant proteins from eukaryotic and prokaryotic sources, bacterial enzymes, or immunotoxins. A BS/MS plus experience in protein/enzyme isolation, HPLC, gel electrophoresis and column chromatography is required.

An additional opportunity exists for an individual skilled in protein structural analysis in a laboratory equipped with ABI 470A and Beckman 890c sequencers, and Beckman 121MB/6300 amino acid analyzers. The successful candidate will possess a BS/MS with experience in amino acid analysis and sequence determination.

Please send your resume in confidence to:

CETUS CORPORATION
Box KRS
1400 Fifty-third Street
Emeryville, CA 94608
E/O/E



POSITIONS OPEN

RESEARCH ASSOCIATE position available as soon as possible for Ph.D. in neurophysiology/neurochemistry to study interactions of neurotransmitters (dopamine) in the functional integrative process of the limbic system and the basal ganglia. Salary \$21,000. Send curriculum vitae and names of three references to: **N. Korstanje, Employment, Room 262, Stevenson-Lawson Building, the University of Western Ontario, London, Ontario, Canada. N6A 5B8.** *In accordance with Canadian Immigration requirements this advertisement is directed to Canadian citizens and permanent residents of Canada.*

RESEARCH BIOCHEMISTS

RESEARCH ASSISTANT PROFESSOR AND RESEARCH ASSOCIATE positions available in biochemical/biophysical or molecular genetic studies of mitochondrial and photosynthetic quinone binding (sites) proteins; characterization of binding of soluble matrix enzymes to electron transfer complexes; enzymology of antibiotic biosynthesis. Starting salary \$16,000 to \$25,000 plus fringe, commensurate with experience. Interested applicants send curriculum vitae, publication list and three names of references to: **Dr. Chang-An Yu, Biochemistry Department, Oklahoma State University, Stillwater, OK 74078-0454.**

RESEARCH FACULTY POSITION

Applications sought for a position at the level of **RESEARCH ASSISTANT PROFESSOR** (nontenure-track) in the **Department of Medicine at the University of Pittsburgh.** Applicants must have a Ph.D. in biochemistry with several years of experience in purification of proteins from reproductive tissues and in monoclonal antibody production. Experience in hormone receptor determinations and reproductive tissue culture is also required. Salary commensurate with experience and qualifications. Please submit curriculum vitae and names of three references by 15 April 1987 to: **Dr. Philip Troen, M.D., Professor and Vice-Chairman, Department of Medicine, University of Pittsburgh School of Medicine, 3459 Fifth Avenue, Pittsburgh, PA 15213.** *The University of Pittsburgh is an Equal Opportunity/Affirmative Action Employer.*

RESEARCH SCIENTIST: Perform research and develop new topical and oral dermatological formulations (creams, ointments, lotions, paste, and so forth) of drugs and reformulations of existing products. Optimize stability and quality of these products using knowledge of biopharmaceutics and physicochemical principles. Ph.D. in pharmaceuticals with a specialization in formulations developments using biopharmaceutics and physicochemical principles required; 40 hours per week; \$39,000 per year. Résumé to: **NYS Job Service, 68 West Huron Street, Buffalo, NY 14202. Job Order #0101602 DOT 041.061074.**

RESEARCH SCIENTIST CELLULAR IMMUNOLOGY/HEMATOLOGY

The **Wadsworth Center for Laboratories and Research** is seeking a research scientist with an interest in cellular immunology and hematology. The individual should have experience in flow cytometry and modern hematology instrumentation. The scientist will be encouraged to develop his/her own research interests, as well as to collaborate with other scientists to encourage developing cellular immunology and hematology research. The scientist will also have responsibilities for providing expertise in implementing appropriate proficiency testing programs in flow cytometry and hematology. There is a very definite commitment at the Wadsworth Center for support of innovative research of public health relevance. The candidate must have either a Ph.D., M.D., or D.V.M. with appropriate experience.

Please send curriculum vitae and names of three references to: **Felix H. Heilpern, Wadsworth Center for Laboratories and Research, Empire State Plaza, Albany, NY 12201.** *An Affirmative Action/Equal Opportunity Employer.*

RESEARCH SCIENTIST POSITION available immediately in research lab to study lipoprotein metabolism in steroid tissues using combined biochemical and physiological techniques. Salary Grade GS-9 (\$21,804). U.S. citizens only. Send résumé and names of three references to: **Dr. Salman Azhar, GRECC 182B, VA Medical Center, 3801 Miranda Avenue, Palo Alto, CA 94304.**

POSITIONS OPEN

DARTMOUTH Medical School Department of Psychiatry is searching for a **RESEARCH SCIENTIST** with special competence in psychopharmacologic research. Focus on neuroreceptors desirable but any related area acceptable. Teaching of medical students and psychiatry residents required. Secondary appointment in Department of Pharmacology. Faculty rank and benefits dependent on experience. Please send curriculum vitae and references to: **Peter M. Silberfarb, M.D., Professor of Psychiatry and Medicine, Chairman, Department of Psychiatry, Dartmouth Medical School, Hanover, NH 03756.** *Dartmouth is an Affirmative Action/Equal Opportunity Employer.*

RESEARCH SCIENTIST I

Responsibilities: Assist staff research scientist to develop a global geo-referenced data and information system to be used to map the location and intensity of deforestation world-wide; oversee the development and organization of global databases of soil, vegetation, topography, climate, and other biogeographical features to be used with computer models of global biogeochemical cycles; develop simple computer programs to access and retrieve selected portions of these data by utilizing an existing geographic information system; assist developing empirical relationships between biogeographical parameters and ecosystem processes. This is a grant-funded position for 2 years, continued employment contingent upon funding.

Minimum qualification: bachelor's degree in biology, geography, ecology or related discipline. At least 1 year of experience in Fortran computer programming; expertise in modeling biological systems, computerized cartography, remote sensing data analysis or numerical geography; experience with geographic information systems or remote sensing systems; experience using and/or organizing large databases. Salary: \$18,660 to 28,960, starting salary normally not to exceed \$20,920. Application deadline: 27 February 1987. Send résumé to: **Mr. David Skole, Research Scientist, Complex Systems Research Center, Science and Engineering Research Building, University of New Hampshire, Durham, NH 03824.**

The University of New Hampshire is an Equal Employment Opportunity/Affirmative Action Employer.

The **Department of Pathology and the Department of Laboratory Medicine of the Yale University School of Medicine** are seeking a **SENIOR ANATOMIC PATHOLOGIST** and a **SENIOR CLINICAL PATHOLOGIST** for the West Haven Veterans' Administration Medical Center. Each individual will be expected to provide leadership in their respective disciplines, including clinical service, residency training and research. Appointments will be at the level of full or associate professor, depending on qualifications. Applicants should hold the M.D. degree; be certified in anatomic or clinical pathology or both; and have established capabilities in the clinical, educational and research aspects of their specialty. Candidates are requested to submit curriculum vitae with references to: **Michael Kashgarian, M.D., Chairman, Search Committee for Laboratory Service of WHVAMC, Department of Pathology, Yale University School of Medicine, 310 Cedar Street, P.O. Box 3333, New Haven, CT 06510.** *Yale University is an Affirmative Action/Equal Opportunity Employer.*

Department of Anatomy at the University of California, San Francisco, invites applications for a tenure-track position in the area of **CELL BIOLOGY.** Applicants should have a Ph.D. or M.D., at least 2 years of postgraduate training, and demonstrated excellence in teaching. The position is at the assistant professorial level; however, applications from exceptional senior candidates will be considered for a more advanced appointment.

The appointee will be expected to conduct an independent research program, to teach at the graduate professional level, and to contribute significantly to the histology teaching programs of the department. Applicants should submit curriculum vitae and representative publications and have three letters of recommendation sent to: **Dr. Mary C. Williams, Chairman, Cell Biologist Search Committee, Department of Anatomy, Box 0452, University of California at San Francisco, CA 94143.** Applications received before 10 April 1987 will be considered. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

RESEARCH CHEMICAL ENGINEER—Ph.D. in chemical engineering with experience in emulsion and particle technologies, with emphasis on synfuel separations, hazardous waste control, particle generation and characterization methods and colloidal formulations. Principal responsibilities will be to conduct research programs in chemical engineering, set up a colloids research facility and apply the principles of colloidal and interfacial phenomena to systems of industrial importance. Must have the ability to evaluate processes for synfuel production and hazardous waste control and use techniques to measure interfacial properties. Starting salary will be \$3038 per month for a 40-hour work week. To apply, contact: **Job Service, 516 North Mangum Street, Durham, NC 27701,** or your nearest **Job Service office.** Refer to **Job Order Number NC6108873, DOT Code 008.061-022.** *An Equal Opportunity/Affirmative Action Employer.*

SCRIPPS INSTITUTION OF OCEANOGRAPHY/STRATIGRAPHY—PALEOCEANOGRAPHY. Applications are invited for a tenure-track faculty position in the general field of stratigraphy and paleoceanography. We seek someone at the assistant professor or junior associate professor level. Preference will be given to individuals with interests in marine science. Candidates will be expected to conduct research in stratigraphy or paleoceanography. The position involves graduate-level teaching and the supervision of graduate student research. Applicants must hold the Ph.D. degree and have demonstrated excellence and independence in their research. The level of the appointment and salary are commensurate with qualifications and experience. Assistant-level candidates will be expected to show evidence of their potential through letters of recommendation and a publication record appropriate for their experience. Associate-level candidates must show evidence of a strong research record in their specialization. There is a possibility that more than one appointment can be made. Please send curriculum vitae, including description of research interests, list of publications, résumé of teaching experience, and names of at least three references to: **Professor LeRoy M. Dorman, Chair, Graduate Department, A-008, Scripps Institution of Oceanography, University of California, San Diego, La Jolla, CA 92093.** Closing date for applications is 15 April 1987. *An Equal Opportunity/Affirmative Action Employer.*

Southeastern Massachusetts University invites applications for a **UNIVERSITY PROFESSOR OF MARINE SCIENCE.** We seek a creative and energetic scientist or engineer to assume responsibility for design, development, and direction of our Marine Science Institute, an interdisciplinary marine science program, and for the University's role in Massachusetts "Center of Excellence in Marine Science." This is an opportunity for program development in one of the nation's unique economic environments which has fostered effective partnerships between public higher education and the private sector.

Applicants should hold an earned doctorate in a discipline active in the marine sciences and have a record of accomplishment which qualifies for a tenured professorship in an academic discipline. She/he shall also have a record in development and execution of grant-supported research that demonstrates entrepreneurial and administrative skills and is recognized for scientific achievement.

SMU is a state-supported institution of over 5500 students and is located an hour's drive south of Boston, 30 minutes west of Cape Cod and 30 minutes east of Providence, RI. A new Science and Engineering building is scheduled for occupancy in 1988 and a new Coastal Zone Resources Laboratory is projected to come on-line as early as 1990.

We anticipate an effective appointment date of 1 September 1987, or as soon thereafter as feasible. Salary is competitive and based on qualifications. Applications, including letter of intent, current résumé, and names, addresses, and telephone numbers of three references should be sent to: **Professor of Marine Science Search Committee, Office of Academic Affairs, Southeastern Massachusetts University, North Dartmouth, MA 02747.** While applications will be accepted until the position is filled, screening by the committee begins 2 March 1987. Applications will be acknowledged and held confidential up to the time of invitations for interview. *Southeastern Massachusetts University is an Affirmative Action/Equal Opportunity Employer.*

Ph.D. Immunopharmacologist

Procter & Gamble is seeking a Ph.D. research scientist to fill a position in product development. The applicant should have a Ph.D. in immunopharmacology, immunology, pharmacology, or biochemistry, with 0-2 years of postdoctoral experience. Requirements include a good understanding of research methods involved in *in vitro* and *in vivo* assessment of inflammatory disease states. Specific responsibilities will include studying the effects of novel compounds on enzymes involved in prostaglandin and leukotriene biosynthesis, as well as effects on macrophage, lymphocyte, chondrocyte, and synoviocyte functions. Background experience in the regulation of immune function by lymphokines and/or cytokines is desirable.

Besides offering a stimulating environment for professional growth, the Company provides a competitive employment package including paid relocation, and Company-paid health, dental, and profit sharing benefits.

Candidates must be U.S. citizens or hold a permanent resident visa. Resumes with publication lists should be sent to:

Dr. T. J. Logan, Manager
Ph.D. Recruiting
Immunopharmacologist Position
The Procter & Gamble Company
Miami Valley Laboratories
P.O. Box 39175, Cincinnati, Ohio 45247

Procter & Gamble

AN EQUAL OPPORTUNITY EMPLOYER

RESPIRATORY PHYSIOLOGIST

The Procter & Gamble Company has an immediate entry-level opening for a Ph.D. respiratory physiologist. The position is in the respiratory research program at the Miami Valley Laboratories in Cincinnati, Ohio. This individual will conduct research to elucidate the relationship between inflammation in the respiratory tract and subsequent alterations in the mucosal surface. This research will include the development of a model(s) of inflammation, characterization of the inflammatory response, and evaluation of potential therapeutics. This position will require the candidate to conceptualize as well as test hypotheses at the basic and applied research levels. Experience with whole animals and a strong background in respiratory physiology, inflammation, biochemistry, and the properties of mucosal surfaces is desirable. Experience at the postdoctoral level is preferred but not required. This respiratory research program is part of a health care division with responsibilities ranging from basic disease-related research to early clinical testing of new drug candidates.

Candidates must be U.S. citizens or hold a permanent resident visa and should send their resume with publication list to:

Dr. T. J. Logan, Manager
Ph.D. Recruiting
Respiratory Physiologist Position
The Procter & Gamble Company
Miami Valley Laboratories
P.O. Box 39175, Cincinnati, Ohio 45247

Procter & Gamble

AN EQUAL OPPORTUNITY EMPLOYER

Research & Scientific Professionals: Some of the most challenging and rewarding careers can be found in the Poconos

That's right . . . the Poconos! Connaught Laboratories is a well established company whose proud history of being at the forefront of developing and producing effective immunological advances has made us one of the largest suppliers of vital vaccines in the world.

Our commitment to on-going research and product excellence has created the following opportunities at our Pocono mountain facility:

SENIOR RESEARCH MICROBIOLOGIST

This position requires a Ph.D. with at least 1 year of post-Doctoral experience and in-depth knowledge of the mechanisms of bacterial pathogenesis. The successful candidate will be involved in a variety of projects related to the isolation and characterization of antigens from human bacterial pathogens as well as the development of those methods which are applicable to human vaccines.

RESEARCH ASSISTANTS

Several opportunities are currently available for Research Assistants to be involved in the following areas:

Process Development & Application

Applicants must possess a BS/MS in biochemical engineering plus an appropriate background in microbiological processing and large scale purification systems.

Product Improvement

Requires a BS/MS in biochemistry as well as experience with HPLC, gel chromatography and electrophoresis.

Immunochemistry

Candidates must possess a BS/MS in biochemistry and hands-on experience in clinical chemistry and clinical serology.

Biochemistry

Applicants must possess background in bio-organic chemistry, protein modification and carbohydrate biochemistry.

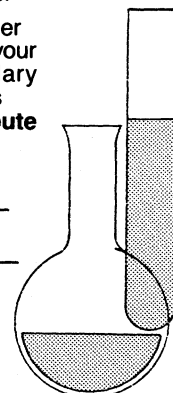
A career with CLI can offer the dedicated professional the unique environment you've been looking for. In addition to competitive salaries, outstanding benefits, and a recreation oriented lifestyle, Connaught listens to good ideas, recognizes talent and rewards performance.

So, if you've been looking to combine career challenge with a better way of living, send your resume to us today! Please include salary history and forward to: **Human Resources Dept., Connaught Laboratories, Inc., Route 611, P.O. Box 187, Swiftwater, PA 18370.**

 **CONNAUGHT**
LABORATORIES, INC.

*Committed to good health
through effective immunology!*

We are an equal opportunity employer M/F/H/V



POSITIONS OPEN

UNIVERSITY OF COLORADO AT BOULDER

The Institute of Cognitive Science invites applications for a **TENURE-TRACK POSITION** in the artificial intelligence group in the Department of Computer Science. Candidates should have demonstrated interests in Cognitive Science, with emphasis on connectionist models, knowledge-based systems, machine learning, or natural language processing. The University of Colorado provides a superb computational environment, including Symbolics, Hewlett-Packard, and Xerox AI workstations, and multiple Suns and VAXes, as part of a major commitment to AI research. Applicants should send résumés and three letters of reference to: **Dr. Martha Polson, Assistant Director, Institute of Cognitive Science, Campus Box 345, Boulder, CO 80309-0345**. Applications should be received by 16 March 1987, to ensure consideration. *The University of Colorado at Boulder has a strong institutional commitment to the principle of diversity in all areas. In that spirit, we are particularly interested in receiving applications from a broad spectrum of people, including women, members of ethnic minorities and disabled individuals.*

TOXICOLOGIST

The Department of Veterinary Sciences, University of Wyoming, invites inquiries and applications regarding a full-time, tenure-track faculty position for a toxicologist to participate in teaching, independent and collaborative research, and diagnostic duties within the Department. Candidates should have D.V.M. and/or Ph.D. degree. Persons with board certification or eligibility in toxicology and diagnostic training will be given preference. Academic rank and salary are negotiable and will be commensurate with experience.

Applicants should submit curriculum vitae, two recent publications, and the names of three individuals from whom direct letters of professional reference can be requested. Applications will be accepted through 15 April 1987, or until a suitable candidate is identified. Address all correspondence to: **Dr. Elizabeth Williams, Chairman of Search Committee, Department of Veterinary Sciences, College of Agriculture, University of Wyoming, Laramie, WY 82071. Telephone: 307-742-6638.**

VERTEBRATE ZOOLOGIST. A 1-year position starting fall 1987. Teaching assignments will be vertebrate embryology, vertebrate comparative anatomy, and general biology. Assistant professor—target level. M.S. degree required; Ph.D. preferred. College teaching experience and/or postdoctoral experience preferred. Send curriculum vitae, all transcripts, three letters of reference, and a brief statement of teaching philosophy by 30 March 1987, to: **Dr. Carl Train, Chairperson, Department of Biology, Southeast Missouri State University, Cape Girardeau, MO 63701. An Equal Opportunity/MFE/Affirmative Action Employer.**

VERTEBRATE ZOOLOGIST OR PHYSIOLOGICAL ECOLOGIST

Randolph-Macon College, a small liberal arts college committed to quality undergraduate teaching, has a tenure-track position in biology beginning September, 1987. The appointment is expected to be at the rank of **assistant professor** and the Ph.D. is required. Teaching duties include courses in general biology, physiology, and vertebrate field biology or marine biology, and the direction of undergraduate research. Send letter of application, curriculum vitae, transcripts, and three letters of reference by 15 March 1987 to: **Dr. W. W. Martin, Chairman, Department of Biology, Randolph-Macon College, Ashland, VA 23005. An Equal Opportunity Employer.**

CONFERENCES

The 14th Annual Conference on the National Organization of the Black Chemists and Chemical Engineers (NOBCChE) will be held 13 to 18 April 1987 in San Francisco, CA. The theme of this year's meeting is: "Science Education: Tomorrow's Challenge, Today's Need."

Registration Information
Ms. Winifred Burks
4439 Seminole Way
Pleasanton, CA 94566
Telephone: 415-422-6365

COURSES

ELECTRON MICROSCOPY (TEM/SEM): Biological Applications. Designed for professional and laboratory personnel who desire practical hands-on training in basic techniques of TEM and SEM. Graduate credit and/or certificate awarded. Tuition: \$850. Date: 29 June through 17 July 1987. For further information and registration form contact: **Dr. Dan Scheirer, Department of Biology, Northeastern University, Boston, MA 02115; telephone: 617-437-2260.**

SYMPOSIUM

MOLECULAR MEDICINE AND BIOLOGY IN MAN AND OTHER MAMMALS

Seventh Charles River International Symposium at the Marriott Copley Place, Boston, Massachusetts, 4, 5, and 6 May 1987. For information contact: **Mr. Gilbert M. Slater, Charles River Laboratories, Inc., 251 Ballardvale Street, Wilmington, MA 01887. Telephone: 617-658-6000 extension 334.**

FELLOWSHIPS

AHFMR RESEARCH FELLOWSHIPS IN THE BIOLOGICAL SCIENCES

The University of Calgary, Department of Biological Sciences, invites applications from highly qualified researchers in medically related areas of the biological sciences. Successful candidates will be nominated for scholarships awarded on a competitive basis from the Alberta Heritage Foundation for Medical Research. The Foundation provides a salary and an establishment grant to set up a laboratory. Appointment will be at the assistant professor level with remuneration based on the salary scale at The University of Calgary (1986: \$31,247 to \$48,719). Awardees will be expected to devote at least 75% of their time to research activities. Limited teaching duties and participation in departmental affairs will be required.

Applicants must hold the Ph.D. degree and have at least 2 years of postdoctoral experience. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

Qualified individuals should send their curriculum vitae, a brief description of their research objectives, and the names of three referees prior to 31 March 1987 to: **Chairman, Scholarship and Fellowship Review Committee, Department of Biological Sciences, The University of Calgary, Calgary, Alberta, Canada T2N 1N4.**

POSTDOCTORAL FELLOWSHIP IN PHYSIOLOGIC-CLINICAL BIOCHEMISTRY. We desire a trainee with an interest in and knowledge of amino acid analysis and HPLC to work in a newly established HPLC laboratory. The fellow would assist in developing methods for derivative analysis of amino acids in body fluids. Some repetitive analyses will be required, but, because of the source of the samples, even this part will be of interest to someone interested in the physiology of amino acids and in the disorders of amino acid metabolism. Opportunity for involvement with a well-known medical research facility. Salary is commensurate with training and experience. Initial contract for 1 year; may be renewed.

Interested candidates send curriculum vitae and names of three references to: **Texas Scottish Rite Hospital for Crippled Children, Department of Human Resources, 2222 Welborn Street, Dallas, TX 75219.**

An Equal Opportunity Employer.

TWO PREDOCTORAL FELLOWSHIPS are available. Both are 12-month positions with expected durations of 4 years. The first is a pure research appointment for the study of retinal neurophysiology using intracellular recording techniques. The second is open regarding research area and involves some teaching responsibilities (approximately 10 hours per quarter, fall and winter only). Applicants must have at least a B.S./B.A. degree with outstanding academic record. Program will lead to Ph.D. Tax-free stipend is \$10,000, plus fee waiver. Send curriculum vitae, letter indicating research background and interests, transcripts, GRE scores, and three letters of recommendation by 1 April 1987 to: **Dr. Gary A. Dudley, Department of Zoological and Biomedical Sciences, Ohio University, Athens, OH 45701.**

FELLOWSHIPS

NSERC—UNIVERSITY RESEARCH FELLOWSHIPS

The University of Calgary, Department of Biological Sciences, invites applications for research fellowships in its five divisions: botany; cellular, molecular and microbial biology; ecology; biochemistry; and zoology. Successful applicants will be nominated for University Research Fellowships awarded in open competition by the Natural Sciences and Engineering Research Council of Canada. Appointment will be at the assistant professor level. Remuneration will be based on the salary scale at The University of Calgary (1986: \$31,247 to \$48,719).

Applicants must hold the Ph.D. degree and have some postdoctoral experience. Only those who have a demonstrated ability to carry out productive and independent research of a high calibre will be considered. NSERC Fellowships are open only to Canadian citizens or permanent residents of Canada.

Qualified individuals should send their curriculum vitae, a brief description of their research objectives, and the names of three referees before 31 March 1987 to: **Chairman, Scholarship and Fellowship Review Committee, Department of Biological Sciences, The University of Calgary, Calgary, Alberta, Canada T2N 1N4.**

POSTDOCTORAL FELLOWSHIP IN IMAGING PHYSICS

A postdoctoral position is available in the diagnostic physics section of the **Department of Radiology at Duke University Medical Center.** The successful candidate should have a Ph.D. in physics or engineering and an interest in exploring new techniques in chest radiography. State-of-the-art imaging equipment for the project includes a prototype scanning equalization system as well as a complete system for photostimulable phosphor imaging. Familiarity with VAS VMS or UNIX is desirable. The position will focus on application of the technologies in chest imaging and a strong background in experimental skills is sought. Interested parties should send résumé and three references to:

**James T. Dobbins III, Ph.D.
P.O. Box 3302**

**Duke University Medical Center
Durham, NC 27710**

Duke University is an Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP. Position for recent Ph.D. preferably in nucleic acid biochemistry to investigate mechanism of tryptophan action. Project involves mRNA isolation, in vitro translation, eukaryotic DNA cloning, and related techniques. Send curriculum vitae and names of three references to: **Dr. H. Sidransky, Department of Pathology, The George Washington University Medical Center, Washington, DC 20037. Equal Opportunity Employer.**

VISUAL SCIENCE RESEARCH FELLOWSHIPS. Predoctoral and postdoctoral fellowships are available on a competitive basis in the Departments of Immunology/Microbiology, Anatomy/Cell Biology or Ophthalmology at Wayne State University, School of Medicine. General research areas include: anatomy, biochemistry, cell and molecular biology, clinical vision research, immunology, microbiology, neurobiology, virology and visual psychophysics. This multidisciplinary program is supported by an NIH Training Grant, and requires U.S. citizenship or permanent residency status. Postdoctoral applicants having completed an ophthalmology residency program may qualify for additional supplementation and are encouraged to apply. Program information can be obtained by writing: **Dr. Paul C. Montgomery, Department of Immunology and Microbiology, Wayne State University Medical School, 540 East Canfield Avenue, Detroit, MI 48201.**

An Equal Opportunity/Affirmative Action Employer.

MARKETPLACE

WANTED—NEW CHEMICAL IDEAS

Do you have a product which has never been made before and has new and unique properties?
Do you have a new formulation which will work better than others now used?
Do you have a new process for making a known product at a lower cost?
Do you need "seed money" or other assistance to make the idea become a reality?
If so, contact:

Lopata Research and Development Corporation
222 South Bemiston Avenue Suite 205
Clayton (St. Louis), Missouri 63105
(314) 863-5700



OHIO STATE BIOTECHNOLOGY CENTER

The Ohio State Biotechnology Center seeks six exceptionally innovative scientists to join its faculty at any academic rank. This Center will be composed of 30 new research groups, occupying a newly remodeled, 90,000 square foot building, and will coordinate biotechnology research programs conducted by research groups throughout this comprehensive university. The Center faculty will hold joint appointments with a basic or applied science department within one of the colleges.

The Center expects to develop three major research areas based on the current strengths within the university. The first area to be developed is designated "Plants, Microbes and their Interactions." The university already has strong research programs in fungal molecular biology and plant microbe interactions, and a group of talented young plant molecular biologists have recently joined the university. The six additional scientists will strengthen the research in this area and hold joint appointments in one of the academic departments in the College of Biological Sciences such as Microbiology or Molecular Genetics or in the College of Agriculture in departments such

as Agronomy or Plant Pathology. Individuals with strong research programs in the molecular biology of either plants or microbes, are encouraged to apply.

As development of the Biotechnology Center proceeds, we will build on other areas to create an exciting environment for biotechnological research in this university, which has all of the basic and professional schools in one campus. Access to established graduate programs, modern research facilities, attractive start-up funds, as well as competitive salaries and benefits will be provided.

Columbus, the State Capital, is a growing metropolitan area of more than a million people situated within 500 miles of most of the major midwestern and eastern metropolitan areas of the U.S. and Canada.

Send nominations and applications including C. V., references and a brief statement of research plans to P. E. Kolattukudy, Director, Ohio State Biotechnology Center, Rightmire Hall, The Ohio State University, Columbus, Ohio 43210 by **March 15, 1987.**

Equal Opportunity Affirmative Employer

The Ohio State University



Drug Metabolism

The Department of Drug Metabolism at Smith Kline & French Laboratories, located in suburban Philadelphia, Pennsylvania, is seeking a qualified candidate to join an innovative, collaborative and expanding bioanalytical section.

Primary responsibilities will include the initiation and conduct of a basic research program in drug metabolism and/or an area of personal scientific expertise which will assist in the development and discovery of new drugs; study of the metabolism of novel pharmaceutical agents in laboratory animals and man; elucidation of the mechanism of formation of novel metabolic products; development of quantitative mass spectrometric/analytical methods for the analysis of pharmaceutical agents and their metabolites in biologic media; study of the pharmacokinetics of drug substances in animals and humans; and the publication of results in the scientific literature.

The successful candidate is required to have:

- Ph.D. in Analytical Chemistry, Organic Chemistry, Biochemistry or related area. Two or more years postdoctoral experience is preferred.

- Experience in the isolation and identification of drug metabolites.
- Experience in the daily operation and maintenance of quadrupole and/or magnetic sector mass spectrometers.
- Experience in bioanalytical methods development (including quantitative mass spectrometry, GLC and HPLC) and in the analysis of drugs and their metabolites in biologic media.
- Proven research ability evidenced by an outstanding publications record.
- Excellent communication and interpersonal skills.
- Experience in LC/MS and MS/MS techniques is preferred.

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 Robert F. Obst, R&D Employment Consultant, SmithKline Beckman Corporation, 1560 Spring Garden Street, Philadelphia, PA 19101. We are an Equal Opportunity Employer, M/F/H/V.

SK&F
A SmithKline Beckman Company

OLYMPUS®

The Image of Quality



The BH-2 Series.

**Uniquely modular
to meet your
current and future
requirements.**

The quality of any microscope series relies on the interrelationship of optical performance, mechanical capability, electronic sophistication and its component system of accessories and attachments. For more than six decades, Olympus has dedicated itself to development of a unique fusion of these distinct disciplines. That is the Olympus advantage.

Nowhere is this advantage better exemplified than in the BH-2 System. A totally new generation, this highly advanced series represents a significant contribution to microscopy and photomicrography. Focusing that is smoother, more effortless and in a lower and more comfortable position; freely reachable controls for the stage that is positioned lower for easier processing of multiple specimens; vastly improved illumination for ultra-low magnification in Koehler-type illumination from 1X to 100X; accurate and unvarying brightness control; an advanced, automated photomicrographic system; and a choice of newly formulated long barrel objectives, stands and modules that is second to none. And all of this, a breakthrough in cost-effectiveness.

For literature on the incomparable BH-2 System, write Olympus Corporation, Precision Instrument Division, 4 Nevada Drive, Lake Success, NY 11042-1179. Or phone toll-free 1 (800) 446-5967 for demonstration.

In Canada: W. Carsen Co., Ltd., Ontario.

OLYMPUS®

For literature circle reader service number 12
For a demonstration circle reader service number 13