

in anthropology. The authors have dropped a vast number of hints and suggestions for others to confirm or deny.

The last chapter reports the results of serogenetic surveys carried out by the authors over the last 15 years, along with 50 pages of tables of the original gene and genotype frequency data. Many of the markers studied have direct relevance to health, whereas others are probably selectively neutral. As the genetic uniqueness of individuals becomes more and more important for medical and public health practice, collections such as this gain direct applied relevance.

Apart from the occasional wry comment, the book is free of political posturing. But no one can read about the creation and demise of ethnic groups, the loose mapping between genes and culture, and the manipulation of ethnic identity by individuals and regard with anything but amused cynicism attempts by governments to codify either ethnicity or race.

HENRY HARPENDING
Department of Anthropology,
Pennsylvania State University,
University Park, PA 16802

Books Received

At the Crossroads. The Mineral Problems of the United States. Eugene N. Cameron. Wiley-Interscience, New York, 1986. xxiv, 320 pp., illus. \$35.95; paper, \$22.95.

The Athenian Agora. Excavations in the Heart of Classical Athens. John M. Camp. Thames and Hudson, New York, 1986 (distributor, Norton, New York). 231 pp., illus. \$29.95. New Aspects of Antiquity.

The Auditory Brainstem. A Review of the Structure and Function of Auditory Brainstem Processing Mechanisms. D. R. F. Irvine. Springer-Verlag, New York, 1986. xii, 279 pp., illus. \$49.50. Progress in Sensory Physiology, vol. 7.

Biomolecular Stereodynamics. Proceedings of the Fourth Conversation in the Discipline Biomolecular Stereodynamics (Albany, NY, June 1985). R. H. Sarma and M. H. Sarma, Eds. Adenine, Guilderland, NY, 1986. Vol. 3, 306 pp., illus. \$75. Vol. 4, 324 pp., illus. + plates. \$75.

The "Discovery" of Sudden Infant Death Syndrome. Lessons in the Practice of Political Medicine. Abraham B. Bergman. Praeger, New York, 1986. xiv, 239 pp. \$42.95.

Drought Management and Its Impact on Public Water Systems. Water Science and Technology Board, National Research Council. National Academy Press, Washington, DC, 1986. viii, 127 pp., illus. Paper, \$7.50. From a colloquium, Washington, DC, Sept. 1985.

Electromagnetic Principles of Integrated Optics. Donald L. Lee. Wiley, New York, 1986. xvi, 331 pp., illus. \$39.95.

Fundamentals of Surface and Thin Film Analysis. Leonard C. Feldman and James W. Mayer. North-Holland (Elsevier), New York, 1986. xx, 354 pp., illus. \$47.50.

Gas Chromatography/Mass Spectrometry. H. F.

Linskens and J. F. Jackson, Eds. Springer-Verlag, New York, 1986. xvi, 304 pp., illus. \$79. Modern Methods of Plant Analysis, New Series, vol. 3.

Genetics, Development, and Evolution. 17th Stadler Genetics Symposium (1985). J. Perry Gustafson, G. Ledyard Stebbins, and Francisco J. Ayala, Eds. Plenum, New York, 1986. xii, 361 pp., illus. \$49.50. Stadler Genetics Symposia Series.

The Geological Interpretation of Well Logs. M. H. Rider Blackie, Glasgow, and Halsted (Wiley), New York, 1986. xii, 175 pp., illus. Paper, \$54.95.

National Policies for Developing High Technology Industries. International Comparisons. Francis W. Rushing and Carole Ganz Brown, Eds. Westview, Boulder, CO, 1986. xiv, 247 pp. Paper, \$26.50. Westview Special Studies in Science, Technology, and Public Policy.

Neurotransmitter Enzymes. Alan A. Boulton, Glen B. Baker, and Peter H. Yu, Eds. Humana, Clifton, NJ, 1986. xxvi, 619 pp., illus. \$69.50. Neuromethods, 5.

Neurotransmitters, Seizures, and Epilepsy III. Giuseppe Nisticò *et al.*, Eds. Raven, New York, 1986. xxii, 505 pp., illus. \$70.50. Based on a workshop, Soverato, Italy, Sept. 1985.

No Ivory Tower. McCarthyism and the Universities. Ellen W. Schrecker. Oxford University Press, New York, 1986. x, 437 pp. \$20.95.

Nonmetallic Materials and Composites at Low Temperatures 3. Günther Hartwig and David Evans, Eds. Plenum, New York, 1986. xii, 220 pp., illus. \$49.50. Cryogenic Materials Series. From a symposium, Heidelberg, FRG, Aug. 1984.

Plate Tectonics. How It Works. Allan Cox and Robert Brian Hart. Blackwell Scientific, Palo Alto, CA, 1986. xxiv, 392 pp., illus. Paper, \$29.95.

Polymers in Solution. Theoretical Considerations and Newer Methods of Characterization. William C. Forsman, Ed. Plenum, New York, 1986. xii, 304 pp., illus. \$52.50.

Tradeoffs

by Edward Wenk, Jr.

Imperatives of
Choice in a
High-Tech
World

Supplying numerous examples of technology-laden public policies, Wenk develops a set of principles to delineate the choices that will shape the future.

"Wenk has been in the thick of the power and the politics of technological choice and the elusive public interest, and he has vital things to say. This is one book, lively and provocative, that does matter."—William D. Carey, Executive Officer, American Association for the Advancement of Science

"For responsible decision makers, *Tradeoffs* is a treasury of profound visions about the conflicting world we live in."—Jacques-Yves Cousteau

\$19.95

THE
JOHNS HOPKINS UNIVERSITY PRESS
701 West 40th Street, Suite 275, Baltimore, Maryland 21211

Circle No. 155 on Readers' Service Card

AUTOMATE MEASUREMENT ON YOUR IBM PC

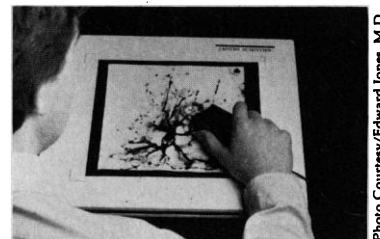


Photo Courtesy/Edward Jones, M.D.

New digitizing tablet with Sigma-Scan™ measurement software. \$1195

Cat #3011 — 12" x 12" system

Resolution of .025 mm, accuracy of at least .25 mm. Comes with state-of-the-art software for area, linear, perimeter, length of curvy line, and angular measurements. X, Y point or stream digitizing. Descriptive statistics. Transfer data to other programs in standard ASCII or DIF format.

Call or write today for more information.

JANDEL SCIENTIFIC
MICROCOMPUTER TOOLS FOR THE SCIENTIST
2656 Bridgeway, Sausalito, CA 94965
800-874-1888
(In Calif. call 415-331-3022)

Circle No. 105 on Readers' Service Card

Products & Materials

Hard Disk Utility Program

HOT is a microcomputer utility that enables the user to quickly create customized menus, completely bypass the complexities of DOS, and locate and edit any file in any drive, all with a single keystroke. HOT is composed of eight utilities: a pop-up text editor, a pop-up file and director locator, a menuing system, a menu-driven keyboard macro program, an automatic menu maker, a pop-up monthly calendar, a DOS-like command line with system statistics and command history, and a menu that allows users to run any data file in any drive merely by pointing to it. HOT also features context-sensitive help screens and an online tutorial. HOT requires an IBM PC, XT, or AT or compatible computer with 256 kilobytes of memory and MS-DOS 2.0 or higher or PC-DOS. Executive Systems. Circle 591.

Scientific Box Furnaces

Models 15P and 25P are digital, two-stage, programmable, box furnaces. Each has a stainless steel cabinet, a safety vertical-lift door, a fire brick muffle, and four-wall heat. Seven functions are programmable: time-delay start, first stage ramp-up, first stage temperature, first stage hold time, second stage ramp-up, second stage temperature, and second stage hold time. Maximum operating temperature is 1100°C. The 15P has a capacity of 1474.8 cm³, and the 25P has a capacity of 2654.7 cm³. Neytech. Circle 561.

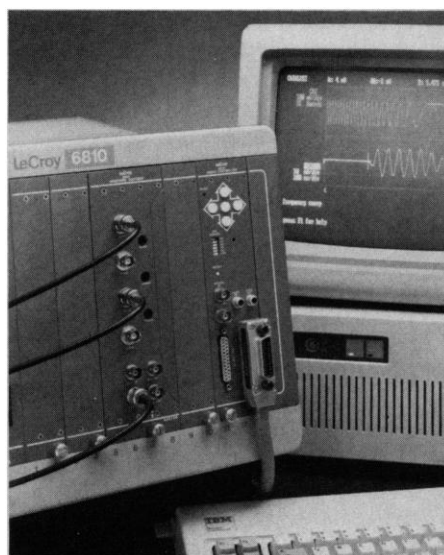
Cylindrical Refrigerator

BR1 is a cylindrical biological refrigerator. The cylindrical shape provides maximum storage in the minimum amount of floor space. Triple-pane cloud-proof plate glass doors ensure clear visibility. Contents are easily seen and easily reached, as a result of the full-height neon interior lighting and adjustable revolving shelves. Interior tem-

perature is maintained at 2° to 4°C. Standard features include 7.6-cm-thick Fiberglas insulation, a locking door fastener, and an automatic defrost. BR1 contains one stationary shelf, six revolving shelves, and 0.8 m³ of space. Jewett Refrigerator. Circle 563.

Waveform Recorder

Model 6810 is a fast, high-resolution, multichannel, digital waveform recorder. It has four input channels, each with a programmable front-end amplifier-signal conditioner and an independent track-hold. The input channels are multiplexed into a single, 5 MHz, 12-bit custom digitizer permitting either four-channel operation at 10⁶ samples per second each or single channel operation



at 5×10^6 samples per second. The 6810 has a built-in 512×10^3 sample memory, expandable to 8×10^6 samples with the addition of optional memory modules. The segmented memory allows continuous, uninterrupted data sampling for repetitive signals with low duty cycles, and the bursts are time stamped. Dual conversion clocks allow importance sampling. The 6810 operates either as a stand-alone benchtop recorder or as one element in a system. It features a RS-232-C interface and may be remote controlled. LeCroy. Circle 560.

Sequence Analysis Software

PC/GENE is a software package for protein chemists and molecular biologists. It contains more than 50 programs for analyzing sequences and managing sequence data bases; half the programs are devoted to peptide analyses. PC/GENE produces high-resolution graphics for most of its analyses.

Both graphic and numeric results may be printed on dot matrix and laser printers. The programs operate on IBM personal computers and compatibles. IntelliGenetics. Circle 564.

Modular FTIR Spectrometer

The RFX-75 is a high-resolution spectrometer for Fourier transform infrared spectroscopy with an open geometry. The modular parts eliminate obsolescence by allowing the user to upgrade or expand at any time. Also, the spectrometer can adapt to the needs of the laboratory, rather than vice versa. The optical system of the RFX-75 allows an infrared beam to be directed to and switched between any number of functional modules without significant loss of energy or need for alignment. The optical head is a compact, self-contained unit with a plug-in sample compartment and three computer-controlled output ports for linking with sampling peripherals. The sources, detectors, interferometer cubes, and sample compartments of the RFX-75 are easily interchanged in the field. The computer is fully compatible with the PC-AT but is more powerful. Independent optical head and display processors enable the user to collect data and manipulate the display independently of the computer. All the RFX-75 software operates in MS-DOS with no overlays. Analect Instruments. Circle 565.

Literature

Test Instruments describes digital test instruments, such as digital oscilloscopes, logic analyzers, and in-circuit emulators. Nicolet Test Instruments. Circle 595.

500 Laboratory Reagents is a catalog devoted to pH buffers, normal-molar solutions, atomic absorption-ion standards, and other solutions for laboratories. LabChem. Circle 596.

BioFlo II discusses a microprocessor-controlled benchtop fermenter. New Brunswick Scientific. Circle 597.

Portable Computer Accessories is a catalog of software, hardware, and accessories for laptop computers. Traveling Software. Circle 598.

Computerist Mainframe describes a 32-bit desktop computer. Digital Electronic Systems. Circle 599.

The REact Buffer Chart is a poster that lists information about enzyme activity and buffer composition and that matches 11 buffers to 60 restriction endonucleases. Bethesda Research Laboratories. Circle 605.

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.

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:
19 December issue (mailed 12 December): **26 November**
2 January issue (mailed 2 January): **17 December**
9 January issue (mailed 8 January): **23 December**
16 January issue (mailed 15 January): **2 January**

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 DISPLAY (POSITIONS OPEN, COURSES, FELLOWSHIPS, MARKETPLACE, and so forth): \$13.00 per millimeter; \$325 minimum, per week (minimum charge covers 25 millimeters on a single column; 25 millimeters equals 10 lines of 50 spaces per line). No charge for use of box number. No agency commission for ads less than 103 millimeters (4 inches). No cash discount. Prepayment required for all foreign ads. Purchase orders and billing address required for all other advertising.

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

Biochemist, Ph.D. Experienced in plant biochemistry, microbial metabolism, natural products isolation and characterization, amino acid metabolism, lipid metabolism, protein purification, and HPLC. Seeks industrial position. Box 199, SCIENCE. X

Biochemist, Ph.D.-Microbiologist, A.M. Professor. Experience in clinical and basic science medical school departments. Successful NIH grantee (20 years). Research interest in basic biochemistry of arterial and lung disease. Desires biochemistry department chairmanship or vice president for research. Box 213, SCIENCE. X

Biochemist Ph.D. with 15 years of research, teaching, and laboratory management experience, seeks challenging position in industry or academia. Twenty-four first author, full-length publications. Pleasant personality, in-depth knowledge of many areas. Very willing to adapt to new projects. Prefers California. P.O. Box 4202, Irvine, CA 92716. X

Molecular Biologist, Ph.D., 1986. Experienced in cDNA library construction, cloning, Southern blots, Northern blots, and sequencing, seeks industrial position. Box 215, SCIENCE. 11/28; 12/5

Research Biotechnology, M.S. with industrial experience, desires challenging laboratory position. Laboratory experiences include molecular biology, recombinant DNA, fermentation scale-up, microbial strain and process development, and utilization of radioisotopes. Separations techniques include: LC, HPLC, agarose/polyacrylamide electrophoresis, ultrafiltration, and supercritical fluid extraction. Box 208, SCIENCE. 11/28; 12/5, 12, 19

POSITIONS WANTED

Symbiologist, frontiersperson, regeneration technophile seeks position in forward-looking, regeneration-oriented industry, agency, or academic department. Strong interest in uses of sustained biological processes for resource management. Currently U.S. Department of Agriculture postdoctoral fellow studying N_2 -fixing actinomycetes (*Frankia*) from root nodules of actinorhizal plants. Former professor, taught general and pathogenic microbiology, immunology, and general biology for 10 years. Available August 1987. Box 195, SCIENCE. X

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 freelance projects of all kinds, including manuals, software documentation, grants and proposals, library research, manuscript critiques and editing, ghostwriting, lectures, and speeches. Box 214, SCIENCE. 11/28; 12/5, 12, 19; 1/2

POSITIONS OPEN

ACADEMIC POSITION FOR NMR EXPERT

The Department of Biochemistry of The Bowman Gray School of Medicine of Wake Forest University is seeking to fill a tenure-track position at the assistant or associate professor level. Candidates should have a strong theoretical background in all aspects of nuclear magnetic resonance and research interests in the application of NMR to the solution of biological problems. The position is for an individual who will carry out an independent research program and be responsible for the NMR core laboratory (Bruker 300-MHz super-wide bore spectrometer). Applicants are requested to send curriculum vitae, three letters of reference, and a brief description of research interests to:

J. W. Parce
Department of Biochemistry
The Bowman Gray School of Medicine of
Wake Forest University
Winston-Salem NC 27103

Affirmative Action/Equal Opportunity Employer.

ANATOMIST SCHOOL OF MEDICINE SOUTHERN ILLINOIS UNIVERSITY

The Department of Anatomy invites applications for a tenure-track position at the **assistant or associate professor** level. Qualified candidates must have a Ph.D. or M.D. degree, at least 2 years of postdoctoral experience, willingness to teach medical students in gross anatomy and at least one other anatomical discipline, and demonstrated ability to perform independent research. Special (but not exclusive) consideration will be given to neuroscientists and reproductive/cellular biologists. Send curriculum vitae, a letter specifying teaching interests and research plans, and at least three reference letters by 15 January 1987 to: **Anatomy Search Committee, School of Medicine, Southern Illinois University, Carbondale, IL 62901.** *Southern Illinois University at Carbondale is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR—BIOCHEMISTRY. The Department of Chemistry at the University of Southern Mississippi (USM) invites applications for a tenure-track position at the level of assistant professor effective September 1987. Responsibilities include development of a strong, independent research program, participation in both graduate and undergraduate teaching, and the training of Ph.D. and M.Sc. graduate students. Applicants from all fields of biochemistry will be considered. USM is the largest of the three state comprehensive universities in Mississippi and has the most dynamic Ph.D.-granting chemistry department in the state. The department currently has 21 faculty members and 42 graduate students. Applicant should submit curriculum vitae and a statement of present and future research interests, and request three letters of recommendation to: **Dr. Terry M. Bricker, Search Committee Chairman, Department of Chemistry, University of Southern Mississippi, Southern Station Box 5043, Hattiesburg, MS 39406-5043.** Applications received after 31 December 1986 cannot be assured of consideration. *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

The University of Alberta invites application for an immediate position at the **ASSISTANT PROFESSOR** level (appointment salary range \$31,612 to \$45,340) in the area of vascular plant systematics with curatorial responsibilities. Preference will be given to applicants with an interest in the North and strong computing background.

Candidates must have a Ph.D. degree, and preferably 2 years of postdoctoral experience.

Curriculum vitae, plus copies of three publications which best exemplify their work, and the names of three referees should be sent to:

Dr. Keith E. Denford
Professor and Chairman
Department of Botany
University of Alberta
Edmonton, Alberta
Canada T6G 2E9

Application due: Monday, 2 February 1987

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

ASSISTANT PROFESSOR

Two tenure-track positions available September 1987. (i) general biologist; demonstrated teaching ability in introductory biology, human sexuality, and biology of invertebrates; teaching experience preferred; research specialty in invertebrate biology; (ii) cell or molecular biologist with ability to teach introductory and radiation biology; research in plant or animal genetics, developmental biology, or molecular neurobiology. Excellence in teaching and development of active research program expected, Ph.D. in biological science required. To be considered, applicants must submit a completed application form, curriculum vitae, names of three references, official graduate transcripts including confirmation of Ph.D., postmarked no later than 30 January 1987 to: **Dr. Don C. Force, Chairman, Biological Sciences Department, California State Polytechnic University, Pomona, CA 91768.** *An Equal Opportunity Employer.*

The Department of Cognitive Sciences at the University of California, Irvine (UCI) has an opening for a tenure-track **ASSISTANT PROFESSOR** beginning fall 1987. We seek a person specializing in one or more of the following areas: (i) perception; (ii) decision processes; (iii) learning, memory, and categorization; (iv) formal theories of cognition. Responsibilities will include research and teaching at the graduate level, and undergraduate teaching in psychology. Preference will be given to candidates with publications in formal theory. Applicants should send letters of interest, curriculum vitae, selected publications, and names of three references to: **Cognitive Sciences Search Committee, School of Social Sciences, University of California, Irvine, CA 92717; Attention Teresa Quinn-Otsuka.** Applications should be submitted by 30 January 1987. *UCI is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR OF DENDROCHRONOLOGY. The Laboratory of Tree-Ring Research invites applications for a tenure-track research and teaching position available July 1987. Successful candidate to develop the laboratory's research on long composite tree-ring chronologies, especially those derived from bristlecone pine and other long-lived species. Research includes the consolidation and expansion of multimillennial chronologies, the investigation of their dendrochronological and statistical properties, the exploitation of their dendroclimatic potential, and their use in dating archaeological and geological wood. Required are Ph.D. or equivalent, demonstrated ability to cross-date tree-ring series, a strong background in quantitative dendrochronology, and ability to initiate and coordinate interdisciplinary research. Salary and possibly rank will depend on qualifications. Deadline for receipt of applications is 31 December 1986. Send curriculum vitae, selected publications, statement of research interests and directions, and names, addresses, and telephone numbers of three references to: **Jeffrey S. Dean, Search Committee, Laboratory of Tree-Ring Research, University of Arizona, Tucson, AZ 85721.** *The University of Arizona is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

POSITIONS OPEN

The Department of Biology, Rochester Institute of Technology, has two full-time, undergraduate, tenure-track ASSISTANT PROFESSOR positions available, funded to start 1 September 1987. (i) **Microbiology.** Teach courses in general microbiology, industrial fermentations. (ii) **Vertebrate zoology.** Teach courses in vertebrate zoology, comparative vertebrate anatomy, human physiology/anatomy; possibly a course in laboratory animal surgical techniques. A third position is open, but is tentative pending final budget approval. (iii) **Plant science.** Teach courses in plant tissue culture, botany, plant physiology, and plant biotechnology. Each position requires Ph.D. degree. Successful candidates will be expected to participate in teaching of general biology and to develop a research program involving undergraduate students in area of expertise. Curriculum vitae and the names of three references should be sent by 30 January 1987 to: **Tom Frederick, Head, Department of Biology, Rochester Institute of Technology, One Lomb Memorial Drive, Rochester, NY 14623.** An Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR OF BIOLOGY, tenure-track. A broadly trained physiologist sought. Teaching includes human and plant physiology and general biology. Experience at the cellular level and a research interest preferred. Evaluation will begin 15 January 1987. Contact: **Steven Mills, Biology Department, Central Missouri State University (CMSU), Warrensburg, MO 64493.** CMSU is an Equal Opportunity/Affirmative Action Employer.

BIOLOGY OF MAMMALS

Cornell University has available a tenure-track position at the level of ASSISTANT PROFESSOR for an organismal biologist with a broad knowledge of mammals. The starting date will be August 1987. The individual will be expected to develop an outstanding research program emphasizing organismal function in an ecological and evolutionary context. Teaching responsibilities will include, in alternate years, an upper division mammalogy course and participation in an introductory course in vertebrate biology/comparative anatomy. Additional teaching would probably include a graduate course in the individual's area of specialization. Depending on the individual's interests, the successful candidate could become the curator of the Cornell mammal collection. We will begin screening applications on 15 January 1987, and expect to interview candidates in March 1987. Applicants should send curriculum vitae, copies of representative publications, a statement of teaching experience, a description of research plans, and the names and telephone numbers of three references. The applicant is responsible for requesting that three letters of recommendation be sent. Address materials to: **Dr. F. Harvey Pough, Section of Ecology and Systematics, Corson Hall, Cornell University, Ithaca, NY 14853-2701.**

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

ASSISTANT PROFESSOR CELL AND MOLECULAR BIOLOGY

The Laboratory of Molecular Biology and the Department of Genetics of the University of Wisconsin-Madison invite applications for a joint, tenure-track position at the rank of assistant professor. Candidates should have research interests in cell or molecular biology to include, but not be restricted to, genetic approaches. Within this broad area, emphasis will be placed on selecting an outstanding individual. Responsibilities will include teaching in the Genetics Department's curriculum, participating in the Interdepartmental Program in Cell and Molecular Biology, supervision of graduate students, and development of an independent research program. Salary will be on a 12-month basis; it will be commensurate with the experience of the candidate and compatible with the salary structure of the University of Wisconsin. To ensure consideration, applicants should submit curriculum vitae, a statement of research interests, and have three letters of reference sent by 15 January 1987 to: **Gary G. Borisy, Chairman, Laboratory of Molecular Biology, University of Wisconsin, Madison, WI 53706.**

The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer; applications from minority and women candidates and other qualified persons are encouraged.

POSITIONS OPEN

BROWN UNIVERSITY ASSISTANT PROFESSOR—IMMUNOLOGY

The Division of Biology and Medicine at Brown University is opening a position for an immunologist with research interests in cellular and molecular mechanisms of the immune response. We seek an individual who will develop an independent research program in immunology, as well as interact with other members of the Graduate Program and hospital faculty interested in immunological aspects of world health problems. A doctoral degree and at least 2 years of postdoctoral research experience are required. The appointment will be a full-time, tenure-track position commencing 1 July 1987, in the Section of Molecular, Cellular, and Developmental Biology. Section faculty are responsible for teaching medical, graduate and undergraduate students, and are members of the Graduate Program in Molecular Biology, Cell Biology, and Biochemistry. This position requires teaching immunology to medical and undergraduate students, offering an advanced course in the appointee's area of interest, and participation in academic advising of undergraduates. Submit curriculum vitae, recent reprints, research prospectus, and have three reference letters sent by 15 January 1987 to: **Dr. John R. Coleman, Chairman, Immunologist Search Committee, Division of Biology and Medicine, Brown University, Providence, RI 02912.** Brown University is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSORSHIP IN BIOLOGY. Specialty in fish physiology. Tenure-track position starting August 1987. Ph.D. degree and publications required; postdoctoral experience preferred. Duties to include undergraduate teaching in general and human physiology. Successful candidate expected to develop externally funded research program. Send curriculum vitae, reprints, transcripts, statement of research interests, and have forwarded three recommendations by January 1987 to: **Dr. Luther A. Knight, Jr., Chair, Physiologist Search Committee, Department of Biology, The University of Mississippi, University, MS 38677.** An Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR—MICROBIOLOGY Department of Biology University of North Carolina at Greensboro

The Department of Biology of the University of North Carolina (UNC) at Greensboro invites applications for the position of assistant professor (tenure-track) with specialty in microbiology. Commitment to excellence in teaching and research is essential. Applicants should submit curriculum vitae, list of publications, including representative reprints, a summary of research plans and teaching interests, list of science courses completed, and three letters of recommendation to:

**Dr. William K. Bates, Head
Department of Biology
UNC-Greensboro
Greensboro, NC 27412**

Application deadline: 30 January 1987. An Equal Opportunity/Affirmative Action Employer.

THE UNIVERSITY OF TENNESSEE— MEMPHIS ASSISTANT PROFESSOR OF PHARMACOLOGY Toxicology/Carcinogenesis

The Department of Pharmacology, University of Tennessee—Memphis College of Medicine, invites applications for a currently available tenure-track position from individuals interested in a faculty position with focus on fundamental biological and/or biochemical studies generally relating to areas of toxicology, including carcinogenesis. Applicants must have a doctoral degree, have completed not less than 2 years of postdoctoral training, and have a demonstrated ability to conduct independent research. The candidate selected for this position will be expected to develop a strong research program and to participate in departmental teaching activities at this health science campus. The closing date for applications is 31 January 1987. To apply, send curriculum vitae, a statement of current and future research interests, and three letters of recommendation to: **Search Committee, c/o Dr. Mervyn Israel, Department of Pharmacology, The University of Tennessee—Memphis, 874 Union Avenue, Memphis, TN 38163.** The University of Tennessee is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSORS—MOLECULAR BIOLOGY, MICROBIOLOGY. Two tenure-track positions (requiring research and teaching) are available for fall 1987. Research areas of special interest are: regulation of gene expression concerned with secondary metabolism, virology, or development; protein engineering. Submit inquiries, curriculum vitae, statement of interests, and names of three references by 15 January 1987 to: **Dr. Wayne E. Magee, Head, Department of Bioscience and Biotechnology, 118 Stratton Hall, Drexel University, Philadelphia, PA 19104.**

Drexel University is an Equal Opportunity Affirmative Action Institution and invites applications from women and minorities.

Physics: Department of Science at Mount Saint Mary's College (MSM), Emmitsburg, MD, invites applications for a tenure-track position at the level of ASSISTANT PROFESSOR, beginning 15 August 1987. Ph.D. desired, A.B.D. considered. Responsibilities include teaching a two-semester introductory physics course, participation in the department's core curriculum offerings for non-science majors, and advising. The development of upper-level physics and/or astronomy course possible. Research encouraged. Entry level assistant professor salary: Low to mid-twenties. Submit letter of application, curriculum vitae, and transcripts of undergraduate and graduate records, and have three letters of recommendation sent to: **John J. Dropp, Ph.D., Department of Science, Mount Saint Mary's College, Emmitsburg, MD 21727.** Application review begins 1 February 1987 and continues until position is filled. MSM is an Affirmative Action/Equal Opportunity Employer.

CORNELL UNIVERSITY

The Department of Education at Cornell University is seeking qualified candidates for a tenure-track position as ASSISTANT PROFESSOR OF SCIENCE EDUCATION.

Qualifications: Doctorate in science education or related field; experience in teaching, teacher education; evidence of scholarly research in education. Responsibilities: teach undergraduate and graduate courses; participate in secondary certification program; effort distribution: 50 percent teaching; 50 percent research. Salary negotiable. Send curriculum vitae and three letters of recommendation to: **Joseph D. Novak, Chair, Search Committee, 404 Roberts Hall, Cornell University, Ithaca, NY 14853.** Closing Date: 5 January 1987.

Cornell University is an Equal Opportunity, Affirmative Action Employer

ASSISTANT RESEARCH IMMUNOLOGIST (Cancer Center). The University of California, San Diego (UCSD) Cancer Center, is recruiting a research scientist with a Ph.D. in the biological sciences to work in the Clinical Immunology Program. The applicant should be experienced in hybridoma technology and have completed postdoctoral training in tumor immunology. The successful applicant will be expected to participate in a currently funded NIH Program Project Grant and direct studies related to human monoclonal antibodies to human tumor cells and in vitro immunization techniques. Salary and rank commensurate with experience. Apply by 19 December 1986 to: **Ivor Royston, M.D., Director, Clinical Immunology Program, UCSD Cancer Center, T-011, La Jolla, CA 92093.** UCSD is an Equal Opportunity Affirmative Action Employer.

TEXAS A&M UNIVERSITY DEPARTMENT OF ENTOMOLOGY ASSISTANT RESEARCH SCIENTIST

A career ladder research position available immediately to study the molecular genetics of baculoviruses: regulation of gene expression, the expression of foreign genes, and post-translation processing. Postdoctoral experience preferred in biochemistry, molecular biology or genetics, and an interest, or ability to develop such, in insect cell molecular biology. Salary starting at \$35,000 per year. Send curriculum vitae and names of three references to: **Dr. Max D. Summers, Department of Entomology, Texas A&M University, College Station, TX 77843.** An Equal Opportunity/Affirmative Action Employer.

VWR designed the perfect environment for your cultures.

Relax. Your cultures are growing under carefully controlled conditions, in an advanced incubator proven in hundreds of labs. Safe from the risk of contamination.

You see, VWR's Model 1820IR CO₂ Water Jacketed Incubator is the first in the industry to use an infrared/CO₂ control system. It monitors CO₂ directly, sensitively and specifically. Its measurements are unaffected by temperature, humidity and air velocity—conditions that change every time someone opens the incubator door. An electronic comparator adjusts CO₂ injection to give you rapid recovery. And we put the temperature sensor right where it counts—in the chamber itself, close to your cultures.

You won't have to worry about contamination that results from condensation and hot spots. For better temperature uniformity, our extra-large, 20-gallon water-

jacket includes a full 6" from the top of the chamber. Even our outer door is temperature-controlled. Furthermore, with our infrared/CO₂ detector, there's no fan to blow spores around. There's no protruding part to harbor microbial growth.

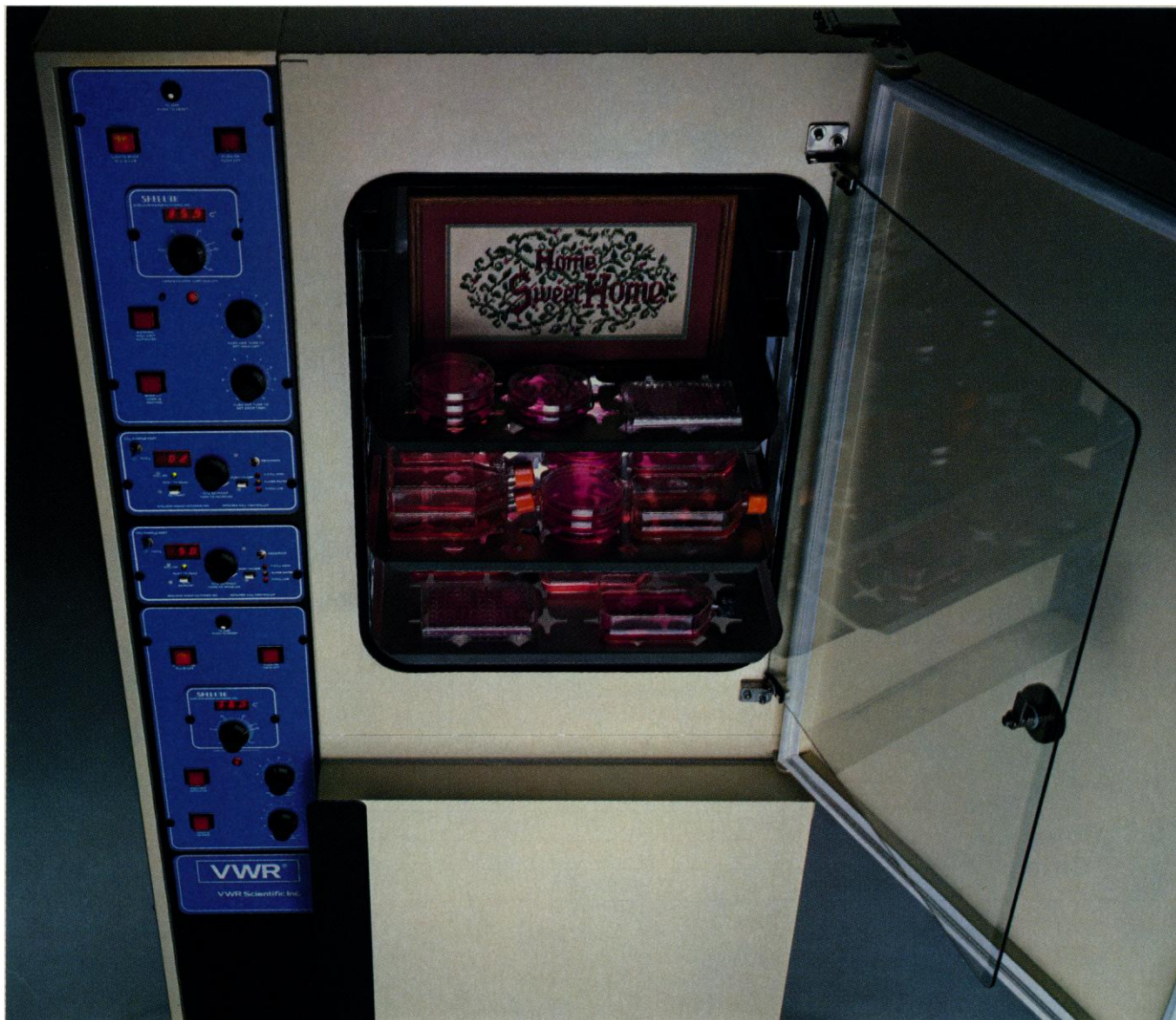
And when your new Model 1820IR Incubator arrives at your lab, VWR will be there to install it. We'll be around when you need technical or service assistance.

Let VWR show you how to make a good home for your cultures. Contact your VWR representative today.

VWR Scientific

A VWR COMPANY

P.O. Box 7900
San Francisco, CA 94120
(800) 227-3900 Ext. 332
(800) 632-2122 Ext. 332 (In California)



E-C Quantum

More In A Power Supply Than Ever Before!

Thanks for helping us design the new E-C Quantum line of high performance electrophoresis power supplies. You told us what you needed and we listened.

The new E-C Quantum 650, for example, can power up to four procedures, supplying up to 6,000 volts, 350 milliamperes, and 200 watts. The full range of Quantum features is too extensive to list here.

Dismiss power supply problems with one phone call 800-624-2232. In Florida, call 800-282-7932. Ask for Technical Service. Or write for our free Electrophoresis Equipment "Wish Book" which has complete information on E-C Quantum high performance and standard power supplies—priced from \$2495 to \$225.

Circle No. 110 on Readers' Service Card



**FREE
Complete
Catalog**

E-C Apparatus Corporation
3831 Tyrone Boulevard N.
St. Petersburg, FL 33709

Please send me:

- ☐ Quantum Line information and prices
☐ "Wish Book" Complete Catalog

name _____
dept. _____ organization _____
street address _____
city _____ state _____ zip _____
Tel: () _____



Improve your DNA Sequencing Efficiency

Because efficiency is so important in DNA sequencing, Bio-Rad has developed innovative products that will give you the productivity edge.

Sequencing Kits

Our Reverse Transcriptase Kit plus Klenow Kit can give you more readable sequence per clone than Klenow alone.

Sequi-Gen® DNA Sequencing Electrophoresis System

The Sequi-Gen cell uses an innovative buffer heat distribution system that is superior to aluminum. A Universal Base accepts six different gel dimensions. The unit has a leak-free upper buffer chamber and requires no grease, gaskets, or tape. When you use the Sequi-Gen cell with Bio-Rad's electrophoresis purity gel reagents, you'll get straighter and sharper bands than with any other unit.

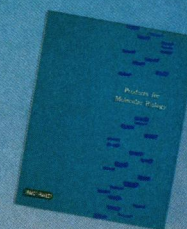
Gene-Master™ DNA Workstation

Gene-Master is an advanced system of hardware and Staden based software for sequence entry and analysis using the IBM AT. Its unique multi-tasking ability triples your analytical power. And, GenBank® entries can be located by keyword in under 10 seconds.

New Molecular Biology Catalog

Learn more about how to improve your efficiency with these and other products for molecular biology. Request your copy of Bio-Rad's Molecular Biology Catalog.

®GenBank is a trademark of NIH



BIO-RAD

**Chemical
Division**

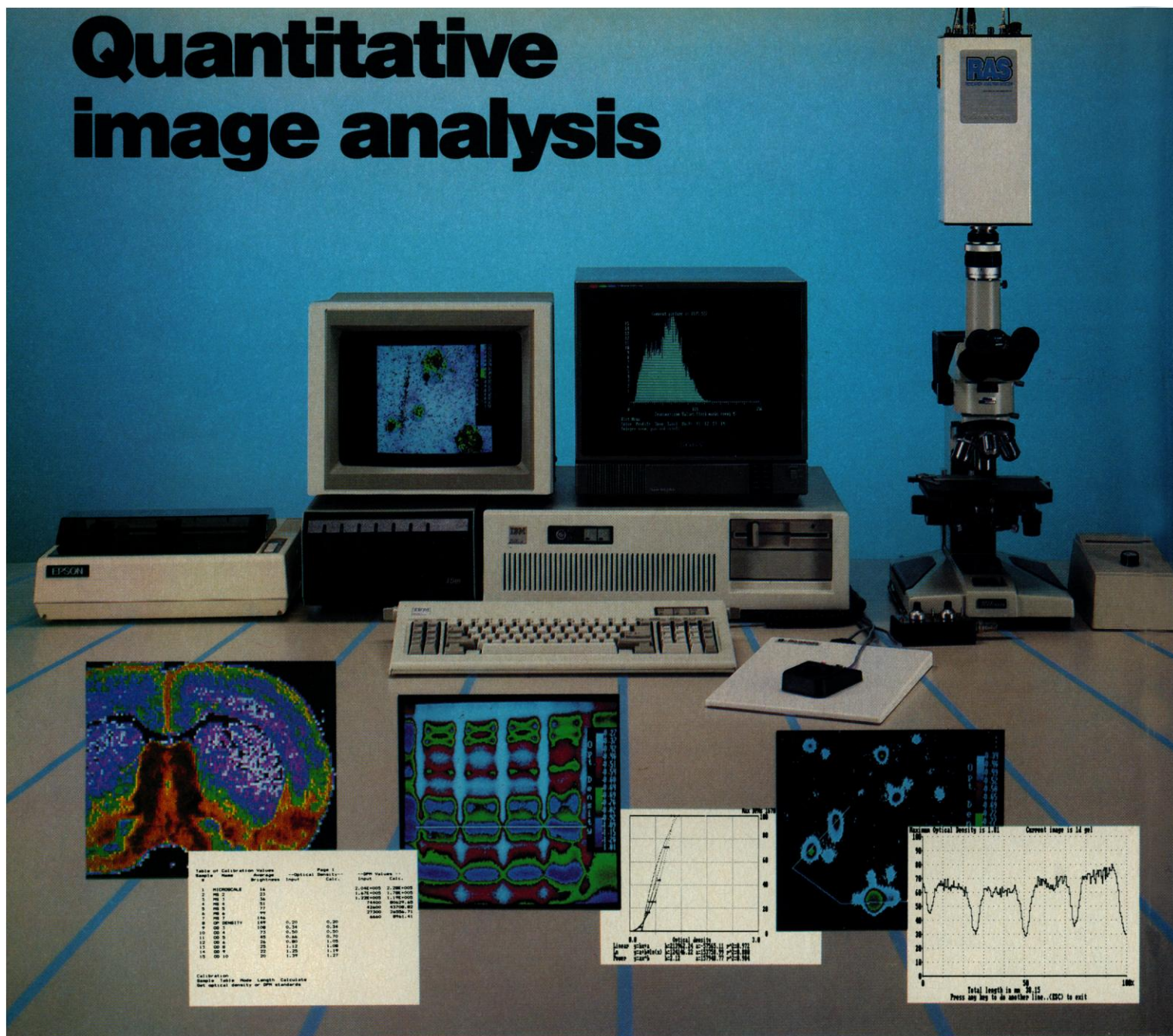
1414 Harbour Way South
Richmond, CA 94804
(415) 232-7000
800-4-BIO-RAD

Also in Rockville Centre, NY; Hornsby, Australia; Vienna,
Austria; Mississauga, Canada; Watford, England; Munich,
Germany; Milan, Italy; Tokyo, Japan; Utrecht, The Nether-
lands; and Glattbrugg, Switzerland.

Circle No. 71 on Readers' Service Card

Answers.

Quantitative image analysis



RAS Instrumentation puts image analysis in a whole new light

Amersham announces a new range of RAS* (Research Analysis System) instrumentation. Each system is configured with a unique modular combination of hardware, firmware and software for easy, accurate image analysis specific to your application.

Applications include:

- Quantitative receptor autoradiography
- Grain and high contrast particle analysis
- 1- and 2-Dimensional gel and dot/slot blot analysis
- 2-Deoxyglucose analysis

Write or call today for additional literature.

*Developed by Loats Associates, Inc.

Amersham Corporation
2636 South Clearbrook Drive, Arlington Heights, IL 60005
(312) 364-7100/(800) 323-9750

Amersham

Amersham Canada Limited 505 Iroquois Shore Road, Oakville, ONT L6H 2R3 (416) 842-2720/(800) 268-5061

Amersham is a trademark of Amersham International plc.

Circle No. 81 on Readers' Service Card

POSITIONS OPEN

ASSISTANT OR ASSOCIATE PROFESSOR. Applications are invited for a tenure-track faculty position in the **Department of Bacteriology, University of Wisconsin-Madison**. The department is most interested in persons with training and experience in microbial genetics, but also encourages applications from outstanding scientists working in microbial biochemistry, microbial ecology, or industrial microbiology/biotechnology. The successful candidate will be expected to develop a dynamic research program in which he or she applies modern approaches to basic questions in one or more of the above areas. Teaching in the bacteriology curriculum and supervision of graduate students are an integral part of the appointment. Due to the excellent scientific environment and facilities of the Department of Bacteriology, this position represents an outstanding academic research opportunity. A detailed curriculum vitae, including research accomplishments and interests and a list of publications, as well as three letters of recommendation, should be sent directly to: **Dr. Ronald D. Hinsdill, Chairman, Department of Bacteriology, 1550 Linden Drive, University of Wisconsin, Madison, WI 53706**, by 1 February 1987. *The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.*

ASSOCIATE DEAN AND DIRECTOR OF RESIDENT INSTRUCTION

The College of Agriculture at the University of Missouri—Columbia seeks to fill this academic position. The successful candidate will provide leadership by working with the faculty and chairpersons in the teaching programs of the college's 15 academic units. Challenges include fostering student recruitment and retention programs and facilitating career development and placement of graduates. Candidates must have a Ph.D. degree in agricultural science or related field and have demonstrated excellence in teaching. Complete applications with names of five references should be received by 15 January 1987. For further information, contact:

**Dr. Thomas R. Yonke, Chairman
Search and Screening Committee
College of Agriculture
University of Missouri—Columbia
2-69 Agriculture Building
Columbia, MO 65211**

BIOLOGIST: The Division of Science, Mathematics, and Engineering, University of South Carolina (USC) at Sumter, invites applications for a tenure-track position for fall 1987 for a broadly trained zoologist. Duties include teaching human anatomy and physiology for nursing students and the teaching of other freshman and sophomore courses emphasizing evolution, animal diversity, and ecology. A candidate with a demonstrated commitment to undergraduate education and a Ph.D. in biology is sought. To apply, send curriculum vitae, transcripts, and three letters of reference by 15 January 1987 to: **Dr. Bob Nerburn, Chairman of Science, Mathematics, and Engineering, University of South Carolina at Sumter, Sumter, SC 29150-2498.** *USC-Sumter is an Affirmative Action/Equal Opportunity Employer.*

BIOLOGY

Assistant Professorship available, fall 1987, for candidate with broad biological background and recent training in molecular biology. Ph.D. required. Initially, successful candidate will teach major's general biology using modern molecular approaches. Candidate will also teach upper division course such as molecular biology, immunology, or molecular genetics in second year; possibility of more upper level courses in future.

Undergraduate teaching is highest priority; research, preferably involving undergraduates, and scholarly achievement are expected, as is advising students and serving on committees.

Ursinus College is 26 miles northwest of Philadelphia in a rural/suburban setting and is an independent, co-ed, liberal arts college of 1200 students with a long tradition of academic excellence.

Send letter of application, curriculum vitae, and names, addresses, and telephone numbers of three references to: **Dr. Peter F. Small, Biology Department, Ursinus College, Collegeville, PA 19426**, by 15 January 1987.

Ursinus College is an Equal Opportunity Employer.

POSITIONS OPEN

BIOLOGIST OREGON STATE UNIVERSITY

Tenure-track position in the area of **cellular or molecular basis of behavior** is open at the assistant professor rank, starting September 1987. This position will contribute to the department's focus on behavioral biology, which presently includes individuals working at the cellular, organismal, and population levels. Applications should include curriculum vitae, reprints, and three letters of reference. Deadline 6 January 1987. **Frank L. Moore, Chairman of Search Committee, Department of Zoology, Oregon State University, Corvallis, OR 97331.** *OSU is an Affirmative Action/Equal Opportunity Employer and complies with Section 504 of the Rehabilitation Act of 1973.*

BIOCHEMICAL TOXICOLOGY—Position available immediately at the **Whitney Marine Research Laboratory of the University of Florida, St. Augustine, FL** for a recent Ph.D. in biochemistry, chemistry, or a related area. Research will focus on the biotransformation of procarcinogens and DNA/macromolecule binding of metabolites in the lobster and other marine species. The position is available for up to 3 years with a starting salary of \$18,500. Please send curriculum vitae with the names of three references to: **Dr. M. O. James, Department of Medicinal Chemistry, Box 1485, University of Florida, Gainesville, FL 32610.**

BIOCHEMIST/MOLECULAR BIOLOGIST

The Department of Biochemistry and Biophysics is seeking applications for a faculty position. This is a 12-month, tenure-track position jointly funded by the College of Agriculture and the Texas Agricultural Experiment Station. Outstanding individuals having research interests dealing with the molecular aspects of regulation, structure, mechanism, or function in microbial, animal, or plant systems are sought. In addition to research, participation in the department graduate and undergraduate teaching programs will be required. A Ph.D. degree in either biochemistry or a related field, plus appropriate postdoctoral experience is required. Academic rank is dependent upon experience and qualifications.

Applicants should send curriculum vitae, list of publications, a brief description of current and future research directions, and names of three references to:

**Dr. E. G. Sander, Head
Department of Biochemistry and Biophysics
Texas A&M University
College Station, TX 77840-2128**

Applications will be accepted until 15 December 1986, or until a suitable candidate is found.

The Texas A&M University System is an Affirmative Action/Equal Opportunity Employer.

CARCINOGENESIS MOLECULAR AND CELLULAR BIOLOGY

Postdoctoral fellowships supported by the **National Cancer Institute** training grant are available for qualified applicants. Postdoctoral candidates with a Ph.D. and/or M.D., D.D.S. or D.V.M., and/or candidates with professional degrees and a Ph.D. are encouraged to apply. Areas of research include DNA viral oncology; DNA damage and repair; stereochemistry and isotope effects in the metabolic activation of carcinogens; role of tRNA modification in promotion of carcinogenesis; identification of anti-carcinogens and role they play in regulation of RNA transport; recombinant DNA technology and the control of dihydrofolate reductase and thymidylate synthetase in the cell cycle; role of estrogen metabolism in hormone-induced cancers; antitumor activity of macrophages; carcinogen modification of transcriptionally active DNA in human cells; tumor imaging studies with boronated-10 MoAb to human tumors; MoAb's for delivery of tumoricidal agents; chemical studies of bay region; -k region activation of polynuclear hydrocarbons; biology of expression on malignant cells. Candidates must be U.S. citizens or permanent residents. Please address letters of either inquiry or application (consisting of curriculum vitae and names of at least three references) to: **Dr. George E. Milo, Director of Carcinogenesis, The Ohio State University Comprehensive Cancer Center, Suite 302, 410 West 12th Avenue, Columbus, OH 43210.**

POSITIONS OPEN

BIOLOGIST/PHYSIOLOGIST

The Department of Biological Sciences, DePaul University, invites applications for a tenure-track position at the assistant professor level starting September 1987. Area of expertise and research interest is open. Ph.D. required. Primary responsibilities include teaching of courses in vertebrate and mammalian physiology, lectures in a team-taught introductory biology course, and participation in an M.S. graduate program, including the direction of thesis research. Ability to teach vertebrate anatomy desirable. Some teaching is expected in a biology course for nonmajors. Applicants are expected to establish an active research program with the potential for external funding. Applicants should send their curriculum vitae, a brief outline of research and teaching interests and goals, selected reprints, and the names and addresses of at least three references by 31 January 1987 to:

**Dr. Robert C. Thommes, Professor
Faculty Search Committee
Department of Biological Sciences
DePaul University
1036 West Belden Avenue
Chicago, IL 60614**

DePaul University is An Equal Opportunity Employer and Educator.

BIOMECHANICS RESEARCH ASSOCIATE. Using advanced computer modeling techniques for static and dynamic stress analysis, general principles of structural analysis, and nonlinear finite element analysis, plan, design, and conduct research experiments in biomechanical applications in human physiology, such as computer modeling of elasto-plastic human joint stiffness (compliance). Write proposals for future research projects and funding in related areas of biomechanics. Forty hours per week. 8:30 a.m. to 5 p.m. **Salary:** \$25,000 per year. Must have masters degree in engineering, with a field of study in structural or mechanical engineering. Required graduate education (classes or thesis work) must have included: (i) computer modeling of elasto-plastic behavior, (ii) dynamics, (iii) finite element method of solving nonlinear mechanics problems, (iv) applied elasticity, and (v) computer programming in FORTRAN 77 and use of stress analysis software packages (ANSYS, SAP, and ANSWER). Must have published research results in scientific journal. Send résumé to: **Illinois Job Service, 910 South Michigan Avenue, Room 333, Chicago, IL 60605; Attention: L. Boksa, Reference Number 5909-B.** *An employer paid ad.*

BOTANIST: Undergraduate college seeks Ph.D. in botany whose specialty emphasizes anatomy-morphology, and/or systematic approaches to botany (not to include plant ecology, physiology, or genetics-molecular biology). The position requires teaching in introductory biology and botany courses and upper level courses in the area of expertise, development of a research program involving undergraduates is required. The tenure-eligible position will be at the level of assistant/associate professor starting August 1987. Send curriculum vitae, transcripts, and three letters of recommendation, which must specifically address the teaching ability and research potential of the candidate, before 20 January 1987 to: **Biology Search Committee, Biology Department, Ithaca College, Ithaca, NY 14850.** *Ithaca College is an Affirmative Action/Equal Opportunity Employer.*

CARDIOVASCULAR SCIENTIST: **Rhode Island Hospital** is recruiting a cardiovascular scientist to direct cardiovascular experimental laboratories within the Division of Cardiothoracic Surgery. Applicants must possess M.D. or Ph.D. and qualify for an academic appointment at assistant or associate professor level at Brown University. Broad training and experience in cardiac physiology is essential; experience in hemodynamics, to include cardiac assist devices, and cardiac electrophysiology, both laboratory and clinical, are desirable. The successful applicant must relate well to others in a supervisory capacity. He/she is expected to compete for research grants. Salary is competitive. *Brown University and Rhode Island Hospital are Equal Opportunity Employers.* Closing date for applications is 17 January 1987. Applications should be sent to: **Michael Cavanagh, Department of Surgery, Rhode Island Hospital, 593 Eddy Street, Providence, RI 02902.**

POSITIONS OPEN

BIostatistician

A research faculty position in biostatistics is available at the Savannah River Ecology Laboratory (SREL) of the Institute of Ecology, University of Georgia. Candidates must be U.S. citizens, have a Ph.D. in statistics, biostatistics, or statistical ecology, and a strong publication record. Faculty rank and salary are negotiable. Major responsibilities include developing a strong, independent research program in biostatistics and interacting with SREL's research ecologists. Candidates will have access to microcomputers, the VAX 11/740, IBM 3081 and Cray computer systems, and statistical packages including SAS and SPSS. Interested persons should send a letter of application, curriculum vitae, copies of transcripts, brief statement of research interests and goals, selected reprints, and four letters of reference to: **Dr. William D. McCort, Chairman, Biostatistician Search Committee, Savannah River Ecology Laboratory, Drawer E, Aiken, SC 29802; telephone: 803-725-2471, by 9 January 1987. The University of Georgia is an Equal Opportunity/Affirmative Action Institution.**

CELL BIOLOGIST

Department of Anatomy with modern research facilities at a state medical school campus seeks candidates for a tenure-track faculty position at the assistant or associate professor level. Candidates must have postdoctoral training and the capability to successfully compete for extramural research support. Preference will be given to individuals who utilize cellular and molecular approaches in biological investigations. The appointment emphasizes research and an academic background which will permit participation in team-taught departmental courses, as well as graduate courses. Salary level is very competitive and depends upon previous experience. For full consideration, candidates must respond by 15 January 1987 with curriculum vitae, a statement of past and future research direction, and the names and addresses of three references to: **Dr. N. S. Vasan, Chairman of Search Committee, Department of Anatomy, University of Medicine and Dentistry of New Jersey (UMDNJ)—New Jersey Medical School (NJMS), 185 South Orange Avenue, Newark, NJ 07103-2757. Applications from women and minority candidates are encouraged. UMDNJ-NJMS is an Equal Opportunity/Affirmative Action Employer.**

DEVELOPMENTAL CELL BIOLOGIST. Assistant professor (tenure-track, 9-month) to develop active research program involving graduate students and external funding. Advisees of undergraduates and teaching of undergraduate embryology courses and a graduate specialty course also required. Preference for applicants with postdoctoral teaching or research experience, success in grant funding, record of publication, and expertise in techniques of cell biology and genetic biotechnology. Successful candidate will be expected to participate in ongoing collaborative research in fisheries biotechnology. Send curriculum vitae and three letters of recommendation by 16 January 1987 to: **Dr. R. A. Brandon, Chair, Department of Zoology, Southern Illinois University (SIUC), Carbondale, IL 62901. SIUC is an Equal Opportunity/Affirmative Action Employer.**

CELL BIOLOGIST—PHYSIOLOGIST. Teach undergraduate courses in both fields and direct undergraduate research. Teach entry-level courses in liberal arts context. Ph.D. required. Prefer teaching experience, knowledge of computer data acquisition. Noncitizens must have permanent residency, work permit. *Affirmative Action/Equal Opportunity Employer.* Send curriculum vitae, transcripts, and three reference letters to: **Dr. W. B. Julian, Dean's Office, Central College, Pella, IA 50219, by 1 January 1987.**

DEVELOPMENTAL BIOLOGIST. Swarthmore College seeks to hire a 1-year leave replacement in developmental biology/embryology starting September 1987. Applicants should have research experience and have a strong commitment to undergraduate education. Interested persons should submit (i) curriculum vitae, (ii) statement of current teaching and research interests, and (iii) three letters of recommendation by 15 January 1987 to: **Dr. Scott F. Gilbert, Department of Biology, Swarthmore College, Swarthmore, PA 19081. Swarthmore College is an Equal Opportunity Employer.**

POSITIONS OPEN

CELL/MOLECULAR BIOLOGISTS

The Department of Anatomy and Cell Biology, Medical University of South Carolina, is continuing to expand its research strength in the area of SECRETION. Applications are invited for two or more positions at the levels of tenure-track assistant professor through tenured full professor. We are seeking individuals who will establish independent research programs and who would benefit by taking multidisciplinary approaches to this problem. We are particularly interested in scientists working on the regulation of gene expression, intracellular trafficking of secreted proteins, and intracellular signaling, but welcome applications from all individuals using modern, innovative techniques to investigate the secretory process.

Interested individuals should send curriculum vitae and the names of three referees to:

**Dr. L. Stephen Frawley
Department of Anatomy and Cell Biology
Medical University of South Carolina
171 Ashley Avenue
Charleston, SC 29425-2203
Telephone: 803-792-3526**

CELLULAR ENDOCRINOLOGIST

The W. ALTON JONES CELL SCIENCE CENTER invites applications for a research scientist in vascular and liver cell endocrinology. Research will involve the isolation, bioassay, and characterization of hormone growth factors for human endothelial, smooth muscle, and liver cells; routine assay of effect of hormones, nutrients, and extracellular matrix on growth and function of human endothelial, smooth muscle, and liver cells in primary and serial culture.

The candidate should possess a Ph.D. degree in cell biology. Background should include primary and long-term serum-free culture of human endothelial cells, smooth muscle cells, and hepatocytes. Experience with bioassay and purification of novel growth factors for vascular and liver cells and knowledge of modern serum-free culture and immunochemical methods is also a prerequisite.

Terms of employment: 37½ hours a week; 5 day work week—some overtime involved; salary: \$30,000 per annum; benefits; paid vacations/holidays; medical, life, and dental insurances; long-term disability and pension plan. Please forward a detailed résumé, names of references, and a list of relevant publications which have been published in major scientific journals to: **Mr. C. Price, LO 8200, 207 Genesee Street, Utica, NY 13501. REFER TO THE FOLLOWING: Job Order Number NY0303599, D.O.T. Code 041.061.026. Equal Opportunity/Affirmative Action Employer.**

DEAN

**School of Arts and Sciences
California State College, Bakersfield (CSB)**

Applications and nominations are invited for the position of dean of Arts and Sciences. The college is one of the 19 campuses, California State University System and enrolls 4300 students in baccalaureate and master's programs; 2/3 of the FTES are in Arts and Sciences. Programs in the school include humanities, sciences, and specialized programs such as nursing, criminal justice, and computer science.

Position should be filled 1 August 1987. Nominations, or letters of application with résumé and names of four references should be sent to: **Search Committee, Dean of Arts and Sciences, c/o Vice President Academic Affairs, California State Bakersfield, 9001 Stockdale Highway, Bakersfield, CA 93311-1099.**

For maximum consideration, deadline is 12 January 1987. CSB is an *Affirmative Action/Equal Opportunity Employer.*

The Biology Department, Loyola Marymount University (LMU), seeks a **DEVELOPMENTAL BIOLOGIST**. Ph.D. tenure-track assistant professor to begin September 1987. Candidate will teach cell biology, developmental biology, and comparative anatomy, and will direct undergraduates in research. Expertise in molecular approaches is desirable. Candidate is expected to maintain a continuing program of scholarly activity. Application, curriculum vitae, statement of research goals, and names of three references to: **Stephen Scheck, Biology, LMU, Los Angeles, CA 90045, by 12 January 1987. Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

CHEMISTRY

**Ball State University
Muncie, Indiana 47306**

A **tenure-track position** is available (pending budgetary approval) in the Department of Chemistry beginning 1 September 1987. The successful candidate will show potential for high quality teaching in physical chemistry or biochemistry, as well as in general chemistry. A Ph.D. degree is required; postdoctoral experience is desired. The development of an active research program for undergraduate and master's degree students will be required. Preference will be given to candidates whose research interests complement those extant in the department. *Women and minority candidates are encouraged to apply.* Send résumé, official transcripts, and three original letters of reference to: **Dr. Ralph Joyner, Chairman, Department of Chemistry, Ball State University, Muncie, IN 47306.** The position will be open until filled. The selection process will begin 5 January 1987. *Ball State University Practices Equal Opportunity in Education and Employment.*

DIRECTOR

ECOLOGICAL RESEARCH INSTITUTE

POINT REYES BIRD OBSERVATORY—an established, nonprofit ecological research institute (emphasis on birds), headquartered in Marin County, CA; projects worldwide.

Applicants must have proven fundraising, public relations, and management skills.

Initial salary negotiable within limits—anticipated in low 30's.

Telephone or write for application packet: **4990 Shoreline Highway, Stinson Beach, CA 94970; telephone: 415-868-1221.** Completed applications must be filed by 31 December 1986.

DIRECTOR OF THE LASER BIOPHYSICS CENTER. The Uniformed Services University of the Health Sciences invites applications for the position of director of the Laser Biophysics Center in the F. Edward Hebert School of Medicine.

The director of the Laser Biophysics Center is responsible for both its operation and the quality of its activities which directly support the teaching and research efforts of the faculty of the School of Medicine. The director assures that a productive and meaningful structure exists to support the university's Medical Applications of Advanced Laser Technology research program. The director also plans and develops research protocols for the Laser Biophysics Center.

Candidates must possess, as a minimum, the Ph.D. or Sc.D. degree, and have substantial experience in biophysical research, teaching, and biomedical research program development. Candidates must have the academic credentials necessary for a faculty appointment in an academic department of the School of Medicine.

The university offers excellent facilities and a salary commensurate with background and experience. Submit curriculum vitae, bibliography, and three letters of recommendation to **The Civilian Personnel Office, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, MD 20814-4799.**

To be considered, applications must be in the Personnel Office by 31 December 1986.

USUHS is an Equal Opportunity/Affirmative Action Employer

SEARCH EXTENDED

PALMER COLLEGE OF CHIROPRACTIC

Nominations and applications are invited for the position of **DIRECTOR OF RESEARCH** at Palmer College of Chiropractic. The college offers doctor of chiropractic and B.S. degrees and plans to offer master's degrees in two disciplines. The director is responsible for long-term planning and for establishing and maintaining a program of scientific chiropractic research. An earned doctorate, with ten or more years of research experience in a health care field is required. Experience in securing external funding is desired. Strong record in publication is preferred. Salary range is \$40,000 to \$70,000, with attractive benefit package. Please send applications to: **Alana Ferguson, Palmer College of Chiropractic, 1000 Brady Street, Davenport, IA 52803.** The deadline is 15 December 1986.

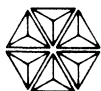
An Affirmative Action and Equal Opportunity Employer

The Bristol-Myers Industrial Division has an immediate opening for a Research Scientist in its Fermentation Development Laboratories. The selected candidate will perform mutagenesis and selection research for the genetic improvement of Bristol's Antibiotic-Producing Microorganisms. Will also develop new screening methods based on biochemical rationales and recombinant DNA techniques.

Microbial Geneticist

To qualify, you should have a PhD in Microbial/Molecular Genetics or Molecular Biology with 2 years of post doctoral training or industrial experience in culture improvement. A strong background in the molecular biology of filamentous fungi or streptomycetes is desirable.

We offer a competitive salary, excellent benefits and a professional environment conducive to growth. For prompt, confidential consideration, forward your resume with salary history and requirement, to:
MANAGER OF EMPLOYMENT



**BRISTOL-MYERS COMPANY
INDUSTRIAL DIVISION**

P.O. Box 4755
Syracuse, New York 13221-4755
An equal opportunity employer M/F/H/V

Molecular Biology Scientists

Biogen is a leading biotechnology company with laboratories in the United States and Switzerland. We have immediate openings for Research Scientists in the following areas:

- Basic and applied research in the expression of foreign proteins in animal cells
- Molecular Biology—based studies of inflammatory disease
- Development of novel approaches to gene isolation

Qualified candidates will possess a Ph.D. degree, preferably with postdoctoral and/or industry experience within one of these areas.

Biogen offers an excellent compensation and benefits package. Please send your c.v. to:

**Manager of Human Resources
Department MBS-116
Biogen
14 Cambridge Center
Cambridge, MA 02142**

An equal opportunity employer.

BIOGEN

Director of Quality Assurance

If you're interested in working on the cutting edge of biotechnology, consider Becton Dickinson. An influential company in an increasingly important field, Becton Dickinson develops monoclonal antibodies and sophisticated computer-based cell sorters for use in medical and biological research.

As Director of Quality Assurance, you'll be responsible for the development, implementation, and maintenance of an effective Quality Assurance program that meets all Division, Corporate, State, and Federal standards for efficacy, safety, and quality. Your program must comply with Good Manufacturing Practice for therapeutic, in-vitro-diagnostic, and research products in both reagent and instrument manufacturing facilities.

This high visibility position calls for someone with a BS in biology, biochemistry, or engineering (or an equivalent background), as well as 10 years' experience in the health care industry, including 5 years in Quality Assurance. Significant supervisory experience is essential and an MS degree is desirable.

For immediate consideration, send your resume and salary history to Manager of Human Resources, Becton Dickinson Immunocytometry Systems, 2375 Garcia Avenue, Mountain View, CA 94043. An equal opportunity employer.

Caring for people is our business.

**BECTON
DICKINSON**

POSITIONS OPEN

DIRECTOR CALIFORNIA PRIMATE RESEARCH CENTER University of California, Davis Davis, CA

Applications and nominations are invited for **Directorship of California Primate Research Center (CPRC)** available 1 July 1987. The director is responsible for management of the laboratory with 24 core and 64 affiliate scientists, 19 collaborating scientists, and 100 graduate students; overall management of research programs; administration through contracts between the *University of California and the Division of Research Resources, National Institutes of Health*, and 35 extramural grants and contracts. CPRC research programs relate to selected human health problems for which the nonhuman primate is the animal model of choice, and have a theme of effects of environmental influences. Major programs in developmental and reproductive biology, fetal and neonatal medicine, respiratory diseases, behavioral biology/pathobiology and primate medicine. The colony consists of approximately 2700 nonhuman primates.

An applicant should have demonstrated success in administration; be a scientist of stature who has made significant contributions in a biomedical field, and have an intent to remain active as an investigator. A background in some aspects of primatology is beneficial, but not essential. The director is expected to qualify for, and will be appointed to, a professional title in an appropriate department on the Davis campus.

Applicants should submit curriculum vitae with the names of three references to: **Dean E. A. Rhode, School of Veterinary Medicine, University of California, Davis, CA 95616**, by 31 December 1986.

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

TENURE-TRACK POSITION ANIMAL PHYSIOLOGIST SANTA CLARA UNIVERSITY

Applications are invited for a tenure-track position in the Department of Biology to start September 1987. Requirements are a completed Ph.D. in an appropriate field, teaching experience, and an active research program in the area of animal physiology. Postdoctoral experience is expected.

The position requires the appointee to teach advanced courses in animal physiology (with laboratory), as well as demonstrate a strong teaching commitment to the lower division core curriculum. The appointee will be expected to develop a vigorous research program with undergraduate participation.

The Department of Biology, which awards the degree of bachelor of science, is within the primarily undergraduate College of Arts and Sciences at Santa Clara University. The department emphasizes both excellent teaching and high quality research.

Submit résumé, official graduate and undergraduate transcripts, names and addresses of three references, and a brief outline of current research to: **Dr. Roberta E. Berlani, Department of Biology, Santa Clara University, Santa Clara, CA 95053**, by 1 January 1987. *Santa Clara University, a Jesuit institution, is an Equal Opportunity/Affirmative Action Employer, Title IX, M/F/H.*

DIVISION DIRECTOR—ENDOCRINOLOGY-METABOLISM: Applications are invited for the position of director, Division of Endocrinology and Metabolism in the Department of Internal Medicine, The University of Iowa College of Medicine. The division, which currently numbers five full-time faculty, has had a long history of excellence in teaching, patient care, and research. A number of faculty are nationally and internationally recognized leaders in their field. Candidates should have an outstanding record in academic endocrinology and be dedicated to providing leadership in teaching, specialized patient care, and research. Applications will be received until the position is filled and should be sent to: **Robert Clark, M.D., Chair, Search Committee, Department of Internal Medicine, The University of Iowa College of Medicine, Room SW-54 General Hospital, Iowa City, IA 52242**. *The University of Iowa is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

DIRECTOR OF SURGICAL PATHOLOGY

Applications are invited from pathologists with previous medical school teaching experience for the position of director of surgical pathology in the Department of Pathology at the College of Physicians and Surgeons, Columbia University. The appointment will carry a senior academic rank, depending on the candidate's previous experience. Requirements include diagnostic experience, demonstrated administrative and teaching ability, and experience in the training of house officers and fellows. A substantial record of publications is essential and applicants with research experience will be given a preference. Send curriculum vitae and names of at least three referees to: **John J. Fenoglio, Jr., M.D., Department of Pathology, 630 West 168 Street, New York, NY 10032**. *Columbia University is an Equal Opportunity Employer.*

THE UNIVERSITY OF CHICAGO DIVISION OF THE BIOLOGICAL SCIENCES

The Department of Pharmacological and Physiological Sciences is considering **FACULTY APPOINTMENTS** from qualified candidates with research interests in the areas of neuropharmacology or endocrine pharmacology. *From the time of its original charter, the principle of the University of Chicago has been to appoint scholars without regard to race, color, religion, sex, or national origin.* Applicants should provide a brief statement of research interests and plans, curriculum vitae and bibliography, and the names of three individuals who are willing to write letters of recommendation to:

**Dr. Alfred Heller, Chairman
Department of Pharmacology
and Physiological Sciences
The University of Chicago
947 East 58 Street
Chicago, IL 60637**

FACULTY POSITIONS IN ANATOMIC PATHOLOGY

The Department of Pathology at the College of Physicians and Surgeons of Columbia University invites applications for faculty positions in anatomic pathology at the assistant and associate professor level. Requirements include diagnostic expertise, teaching ability, and experience in the training of residents and fellows. Areas of diagnostic experience of particular interest are fine needle cytopathology, obstetrics/gynecology, pathology, hematopathology, immunopathology, and pulmonary pathology. A record of publication is essential and applicants with research experience will be given a preference. Academic rank will depend on the applicant's qualifications. Send curriculum vitae and names of at least three referees to: **John J. Fenoglio, Jr., M.D., College of Physicians and Surgeons, Department of Pathology, 630 West 168 Street, New York, NY 10032**. *Columbia University is an Equal Opportunity Employer.*

FACULTY POSITION IN DEVELOPMENTAL BIOLOGY AT THE UNIVERSITY OF CALIFORNIA, BERKELEY

The Department of Zoology invites applications for a faculty position at the assistant or associate professor level beginning with the 1987 to 1988 academic year, pending budgetary approval. The research and teaching interests of the candidate should be in any area of developmental biology, including determination, differentiation, and morphogenesis. The candidate will teach an undergraduate course in developmental biology, and appropriate graduate level teaching. Applicants should send curriculum vitae, bibliography with copies of publications, a summary of research and teaching objectives, and the names of three references to: **CHAIRMAN, DEVELOPMENTAL BIOLOGY SEARCH COMMITTEE, Department of Zoology, University of California, Berkeley, CA 94720**. As part of the reorganization of biological sciences at Berkeley, it is anticipated that this position will soon be incorporated either into the new Department of Cellular and Molecular Biology or the new Department of Integrative Biology.

Closing date for receipt of applications: 15 January 1987.

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

POSITIONS OPEN

ECOLOGIST—An anticipated tenure-track position at the assistant professor level, effective August 1987. The person filling this position is expected to develop a vigorous research program in terrestrial community ecology. Preference will be given to those with a strong quantitative and/or experimental background and whose research interests complement those of other members of the department. The successful applicant will have a strong commitment to teaching at both undergraduate and graduate levels. Ph.D. in a biological science required and postdoctoral experience preferred. Curriculum vitae, statement of research and teaching interests, representative reprints, and three letters of reference should be sent by 30 January 1987 to: **Dr. Peter L. Starkweather, Chair, Department of Biological Sciences, University of Nevada, Las Vegas, Las Vegas, NV 89154**. *The University of Nevada is an Affirmative Action/Equal Opportunity Employer.*

TENURE-TRACK FACULTY POSITION IN BIOCHEMISTRY

The Department of Biochemistry at the University of Wisconsin—Madison invites applicants for a position as assistant professor with emphasis in the area of the biochemistry of animal cells or systems. Candidates must have demonstrated excellence and independence in biochemical research, and have a strong background in biochemistry. The successful candidate will be expected to develop a vigorous and independent research program and participate in the undergraduate and graduate teaching programs in the department. Applications, including curriculum vitae and a statement of plans for future research, should be sent to: **Dr. W. S. Reznikoff, Chairperson, Department of Biochemistry, University of Wisconsin—Madison, Madison, WI 53706**. In addition, candidates should have letters sent from three people familiar with them and their work. Applications should be received by 15 January 1987 in order to guarantee consideration. *The university is an Affirmative Action/Equal Opportunity Employer, and applications are encouraged from women and minorities.*

THREE FACULTY POSITIONS IN APPLIED BIOCHEMISTRY/ MOLECULAR BIOLOGY OREGON GRADUATE CENTER

The Department of Chemical and Biological Sciences at the Oregon Graduate Center is seeking to expand research and teaching programs in biotechnology. We are now inviting applications for the following faculty positions:

Bioorganic Chemist: Strong background in organic and biochemistry. Candidates with interests in enzyme mechanisms involved in biodegradation and/or synthesis are particularly encouraged to apply.

Microbial Biochemist: Strong background in biochemistry or molecular biology with interests in the degradation of natural and/or man-made materials.

Plant Molecular Biologist: Specialization in the molecular biology or genetics of higher plants.

All candidates should have a Ph.D. and several years of postdoctoral experience, and are expected to develop a strong research program and graduate level courses in their areas of specialty. Appointments will be made at the level of assistant professor or higher, depending on qualifications.

Interested candidates should send curriculum vitae, a statement of research interests, and the names, addresses, and telephone numbers of three references by 15 January 1987 to: **Dr. Michael H. Gold, Search Committee Chair, Department of Chemical and Biological Sciences, Oregon Graduate Center, 19600 NW Von Neumann Drive, Beaverton, OR 97006-1999**. *Affirmative Action/Equal Opportunity Employer.*

The Neurobiology Division in the Department of Anatomy and Cell Biology has a tenure-track **FACULTY POSITION** available at the rank of assistant or associate professor to be filled by an individual with a strong commitment to research using contemporary approaches to any aspect of functional brain organization. Send curriculum vitae, names of references, and a statement of research plans to: **R. M. Beckstead, Department of Anatomy and Cell Biology, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425**.

BS/MS SCIENTISTS

The LILLY RESEARCH LABORATORIES, a division of Eli Lilly and Company, is seeking candidates for a position in the Department of Drug Disposition. Applicants must have a Masters Degree or a Bachelor Degree and 2-5 years experience in biochemistry, pharmacology or physiology.

Drug Development

The primary responsibilities will involve the characterization of transport mechanisms involved in the renal and gastrointestinal transport of drugs. Working experience with *in vitro* transport techniques, enzymatic assays, and *in vivo* experimentation is desirable.

This position presents a unique opportunity for a highly motivated individual to demonstrate creativity and independence in a stimulating scientific environment. Qualified applicants should send their resume to:

Mr. Robert F. Dowden
Personnel Representative
Eli Lilly and Company
Lilly Corporate Center
Indianapolis, Indiana 46285



Equal Opportunity Employer

NEUROCHEMIST/ BIOCHEMICAL PHARMACOLOGIST

The Merrell Dow Research Institute has a challenging career opportunity for a Neurochemist/Biochemical Pharmacologist to join our expanding CNS Research Group.

The successful candidate would join a multi-disciplinary team and be expected to contribute actively to both basic research and drug-discovery programs directed toward the identification of new therapeutic approaches to CNS disorders.

Qualified applicants should have a PhD with 1-3 years post-doctoral experience in neurochemistry. Practical expertise in receptor biochemistry and second messenger assays is essential and familiarity with state-of-the-art neurochemical techniques in enzymology and HPLC analysis is desirable.

We offer excellent compensation, comprehensive benefits and relocation assistance. Please send your curriculum vitae and names of three references in confidence to:

Merrell Dow

Personnel Services Manager
(Refer to Job Code MFG)

**MERRELL DOW
RESEARCH INSTITUTE**

2110 East Galbraith Road
Cincinnati, OH 45215

U.S. Citizenship or
Permanent Visa Required

Equal Opportunity Employer M/F/H/V

DIRECTOR, MAMMALIAN GENETICS RESEARCH PROGRAM

The Biology Division of the Oak Ridge National Laboratory seeks a senior investigator to serve as director of a research program in mouse genetics that is funded by the Department of Energy. The program thrust is exploration of the nature of spontaneous and induced genetic disorders in an experimental mammal. Among the resources available are mouse stocks bearing more than one thousand distinctive heritable mutations. The director's responsibilities will include planning, staffing, and leading all research activities within the program. The present staff numbers 45 persons. Interactions with other Division programs in molecular, human and cancer genetics are expected. Preference will be given to candidates with demonstrated achievement in mammalian genetics research, especially with mice. Applicants should send a curriculum vitae to: **Dr. Richard A. Griesemer, Director, Biology Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee 37831.**

ornl

operated by

MARTIN MARIETTA

for the
U.S. Department of Energy
An Equal Opportunity Employer

MICROBIOLOGIST

The National Products Branch, National Cancer Institute, is seeking an experienced microbiologist to administer and provide scientific direction of contractor operated projects for isolation, growth, preservation and preparation of extracts from fungi, cyanobacteria, and diverse marine microorganisms for subsequent antitumor evaluation.

Candidates must meet the minimum federal qualifications requirements. Postdoctoral experience in microbial biochemistry, broad training and experience in growing microorganisms of diverse types, and cancer research experience is desirable.

The position is a nontenured, two-year appointment with possible extension to three years. Salary range: \$37,599-\$57,759.

For additional information call J. Crooke (301) 496-6503.

To apply, submit an SF-171 (Application for Federal Employment) by December 31, 1986 to:

J. Crooke
National Cancer Institute Personnel
Building 31, Room 3A16
9000 Rockville Pike
Bethesda, MD 20892

An Equal Opportunity Employer

POSITIONS OPEN

FACULTY POSITION IN BIOCHEMISTRY. The Chemistry Department at Wayne State University invites applications for an anticipated tenure-track assistant professorship. A Ph.D. and postdoctoral experience is required. Candidates will be expected to develop a strong research program and to teach at the undergraduate and graduate levels. Preference will be given to individuals applying molecular biological approaches to interesting biochemical problems. In addition to excellent space and major instrumentation, the department contains a DNA synthesis and characterization facility consisting of an oligonucleotide synthesizer, fermentors, and equipment for plasmid preparation that is a support facility of the University Molecular Biology Center. Applicants should submit curriculum vitae, a brief description of research plans, and arrange for three letters of recommendation to be sent to Professor Richard Lintvedt, Chairman, Department of Chemistry, Wayne State University, Detroit, MI 48202. Deadline for submission of applications is 22 December 1986. *Wayne State University is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION IN GENETICS DEPARTMENT OF BIOLOGY JOHNS HOPKINS UNIVERSITY

We invite applications for a tenure-track position at the assistant or associate professor level. We are searching for an imaginative, vigorous person studying any aspect of prokaryotic, eukaryotic, or viral genetics to join our department, which is committed to excellence in research and teaching.

To apply, send curriculum vitae, a brief description of research plans, and arrange to have three letters of reference forwarded before 1 January 1987 to:

Chairman, Genetics Search Committee
Department of Biology
Johns Hopkins University
Baltimore, MD 21218

*Johns Hopkins University is an Equal Opportunity/
Affirmative Action Employer*

Stanford University School of Medicine is inviting applications for positions at all academic ranks in a multidisciplinary Unit in Molecular and Genetic Medicine (U-MGM) within the newly created Center for Molecular and Genetic Medicine (CMGM). The U-MGM is expected to accommodate TEN FACULTY whose research interests focus on the molecular and cellular aspects of human physiology and disease. Appointees to positions in the U-MGM will be housed in research facilities that are currently under construction but will be completed by late autumn of 1988. Members of the U-MGM will have their academic appointments in the discipline most appropriate to their research and teaching specialties. It is anticipated that most of the appointees will have their primary affiliation in a clinical department, although joint appointments in basic and clinical disciplines may also be considered. The CMGM will also accommodate the existing Department of Biochemistry, two new Departments—the Department of Developmental Biology and the Department of Molecular and Cellular Physiology—and substantial shared specialized equipment and conference facilities.

Applications should be sent to: Marian Knox, Stanford University School of Medicine, Stanford University Medical Center, Room M-123C, Stanford, CA 94305, and be accompanied by curriculum vitae, bibliography, a brief summary of past, present and future research interests and names of three individuals familiar with your work. *Stanford is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.*

FACULTY POSITION IN PHYSIOLOGY—The Department of Physiology of the Temple University School of Medicine seeks a Ph.D. or M.D. to fill a full-time tenure position. Individual should demonstrate ability to do independent research and be involved in medical and graduate level teaching programs. Salary is commensurate with experience. Send curriculum vitae to: Dr. Peter Lynch, Department of Physiology, Temple University School of Medicine, 3401 North Broad Street, Philadelphia, PA 19140. *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

FACULTY POSITION—New England Academic Medical Center is seeking an individual to assume a leadership role in neurosurgery. Candidates should have evidence of significant research commitment and funding ability, as well as administrative talents and clinical credentials. Applicants should be Board-certified. Send letter of application and curriculum vitae and bibliography to: Box 206, SCIENCE. *Minority and female candidates are encouraged to apply. Equal Opportunity Employer.*

GENETICIST

The Biology Department at Gettysburg College is inviting applications for a tenure-track position in genetics as a Charles H. Dana Faculty Fellow. The primary teaching responsibility will be the genetics component of a full-year, junior level course in cell biology. Another course in the candidate's area of interest and some involvement in the general biology program are expected. The usual teaching load is one course lecture and two laboratory sections each semester. Research is encouraged and supported. Applicants must hold the Ph.D. degree. Send curriculum vitae, statement of teaching and research interests, and three letters of recommendation by 31 December 1986 to: Dr. Sherman S. Hendrix, Chairman, Biology Department, Gettysburg College, Gettysburg, PA 17325. Gettysburg College is a selective liberal arts college related to the Lutheran Church in America. *It is an Affirmative Action Equal Opportunity Employer. Women and minorities are encouraged to apply.*

GENETICIST/MICROBIOLOGIST. Beginning fall 1987. Assistant or associate professor; Ph.D. required; tenure-track. Mainly teaching (genetics, microbiology, human genetics, and two service courses for non-majors), but a research program involving students is expected. Upper level undergraduates and M.S. students. Deadline: 1 March 1987. Send curriculum vitae and names of three references to:

Edwin Kurtz, Chairman
Department of Life Science
The University of Texas of the Permian Basin
4901 East University Boulevard
Odessa, TX 79762

Equal Opportunity/Affirmative Action Employer.

BALL STATE UNIVERSITY MUNCIE, INDIANA

Position Title: IMMUNOLOGIST/VIROLOGIST. Description: The Muncie Center for Medical Education, a regional center of the Indiana University School of Medicine located on the Ball State University Campus, invites applications for a Ball State tenure-track position at the level of assistant or associate professor. Qualified individuals should have a Ph.D. or M.D., with postdoctoral experience preferred. The successful applicant will be expected to establish an independent research program in immunology or virology, and will teach the immunology and virology sections of the medical microbiology course. Salary is dependent upon experience and is competitive with that offered by midwestern medical schools. Interested persons should submit curriculum vitae, graduate transcripts, a brief summary of current research activities, and three original letters of reference to: Dr. T. Stuart Walker, Chairman of Search Committee, Center for Medical Education, Ball State University, Muncie, IN 47306. Applications must be postmarked by 26 January 1987.

Ball State University Practices Equal Opportunity in Education and Employment.

INVERTEBRATE ZOOLOGIST: To teach introductory biology, invertebrate zoology, and to direct research of undergraduates. One-year appointment at appropriate rank. Send application, transcript, and three letters of recommendation to: D. L. Wise, Department of Biology, The College of Wooster, Wooster, OH 44691, no later than 1 January 1987. The College is an independent liberal arts college with a commitment to excellence in undergraduate education. *We wish to ensure that the search identifies qualified candidates who are women or members of minorities. Applicants belonging to these groups are encouraged to identify themselves if they wish. Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

IMMUNOLOGIST MEDICAL COLLEGE OF OHIO

The Department of Microbiology is seeking an established immunologist to develop and run a new Immunology Program. This will involve the recruitment of a number of additional faculty members. The college is prepared to make a major investment of capital, start-up funds, and suitably equipped space for this program.

We are only interested in candidates who have a record of significant research in cellular immunology and/or in molecular immunology. The successful applicant also must be capable of attracting extramural funding. Please send curriculum vitae, three letters of recommendation, a statement of research goals, and ideas for development of the Immunology Program to: Earl H. Freimer, M.D., Department of Microbiology, Medical College of Ohio, C.S. number 10008, Toledo, OH 43699.

INTERDISCIPLINARY SMOOTH MUSCLE RESEARCH GROUP

The University of Calgary, Faculty of Medicine, invites applications from junior and senior investigators in smooth muscle research (biophysics, cell biology, molecular biology, morphology, physiology, biochemistry, and pharmacology). A new smooth muscle research group is being established, which will consist of a core of basic scientists interfacing with clinical investigators in cardiovascular, gastroenterological, respiratory, obstetrical and urological sciences, and hypertension research. Applications are also invited from senior investigators with exemplary research, leadership, and management skills to provide leadership to the group. The initial senior investigator shall have a central role in the recruitment of several junior investigators. Applicants who are successful will be eligible for salary support from the Alberta Heritage Foundation for Medical Research and will be offered positions at appropriate ranks within the appropriate academic departments.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

Closing date for applications is 31 January 1987. Please forward curriculum vitae, research plans, and the names of three referees to: Dr. K. MacCannell, The University of Calgary, Faculty of Medicine, 3330 Hospital Drive N. W., Calgary, Alberta T2N 4N1, Canada.

PRINCETON UNIVERSITY DEPARTMENT OF BIOLOGY

A position is open for a LECTURER (non-tenure-track) to be in charge of all the laboratories in the introductory biology courses which run throughout the academic year. The work would involve responsibility for the plans for each weekly laboratory, their preparation, and their supervision. The person will also supervise his or her support staff of preparators and the teaching assistants who run the laboratory sessions. Anyone wishing to apply should send his/her curriculum vitae and arrange to have two letters of recommendation sent. Address all material to: E. Lechner, Secretary to the Search Committee, Department of Biology, Princeton University, Princeton, NJ 08544.

Deadline: 15 December 1986

An Equal Opportunity/Affirmative Action Employer

MOLECULAR BIOLOGIST: The Division of Rheumatology, Department of Medicine, University of Colorado, Health Sciences Center, invites applications for a position at the beginning faculty level. Applicants should have completed at least 2 years of postdoctoral work with experience in the regulation of gene expression. The position is full-time research in a laboratory interested in regulation of synthesis of interleukin 1 in human monocytes. The position is available in 1987 with the latest starting date 1 July. Salary and start-up funds will be provided, but the appointee will be expected to participate in applying for research support. Please submit curriculum vitae, summary of research experiences, and a list of four references to: William P. Arend, M.D., Professor and Head, Division of Rheumatology, Department of Medicine, University of Colorado Health Sciences Center Box B115, 4200 East Ninth Avenue, Denver, CO 80262. *The University of Colorado is an Affirmative Action/Equal Opportunity Employer.*

SCIENTIFIC EXCHANGES

NAS Scientific Exchange Program with the U.S.S.R. and Eastern Europe

The National Academy of Sciences (NAS) invites applications from American scientists who wish to make visits beginning during the period September 1, 1987 through December 31, 1988 to the U.S.S.R., Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, Romania, and Yugoslavia. Long-term research visits of 3 to 12 months duration are encouraged, particularly if contact with colleagues in the other country has already been established. The minimum length of visits is 1 month in one country.

Applicants must be U.S. citizens and have a doctoral degree or its equivalent by June 1987 in physics; chemistry; mathematics and computer sciences; earth, atmospheric, and oceanographic sciences; agricultural, forestry, fishery, and plant sciences; biological and medical sciences; environmental sciences; engineering; archaeology and anthropology; geography; or psychology. Also included are science and technology policy studies and other aspects of the economic and social sciences that involve quantitative analysis. Other scientific disciplines not explicitly mentioned will be considered on a case-by-case basis. Necessary expenses will be met by the NAS and the foreign academy, including reimbursement for long-term visitors for salary lost up to a predetermined maximum and expenses for accompanying family members for visits exceeding 5 months.

Requests for applications should reach the National Academy of Sciences not later than February 13, 1987. Applications must be postmarked by February 28, 1987. Address application requests to:

National Academy of Sciences
Office of International Affairs
Soviet and East European Affairs (JH-218)
2101 Constitution Avenue, NW
Washington, D.C. 20418
Telephone: (202) 334-2644

QUANTITATIVE RESEARCH

A leading Chicago investment firm is looking for individuals with strong technical and research experience. Advanced degree in geophysics, engineering, mathematics, physics, or equivalent experience, required. Good computer skills a necessity, with Fortran required, C and UNIX a big plus, for conducting state-of-the-art research on the behavior of equity, bond, futures and options markets. Salary commensurate with background and experience.

If you qualify and are interested in an excellent growth opportunity, send resume to:

Box 210,
SCIENCE

NIOSH ANNOUNCES RESEARCH AWARDS



FOR Ph.D. & M.D. SCIENTISTS

The National Institute for Occupational Safety and Health announces outstanding opportunities for research in:

- applied psychology
- bioacoustics
- health physics
- ergonomics
- epidemiology

The National Research Council in cooperation with the National Institute for Occupational Safety and Health, Division of Respiratory Disease Studies in Morgantown, West Virginia will offer competitive research awards in 1987 for independent scientific research. Recipients will be free to work on problems of their own choice as guest investigators at NIOSH. This program is open to experienced senior scientists as well as to recent PhD and MD graduates. Stipends begin at \$26,350 for recent graduates and are appropriately higher for seniors. Relocation reimbursement and funds for professional travel on tenure are available, and a health insurance program is offered.

For further information and application materials please write to:

Associateship Programs (JH608/NI-2)

National Research Council

2101 Constitution Avenue, N.W.
Washington, D.C. 20418

Deadlines for application are
January 15, April 15 and August 15.



SCIENTIST

Cistron Biotechnology has an immediate opening for a protein biochemist at the Scientist level. The successful applicant will possess at least a masters degree (Ph.D. preferred) and will be versatile, capable of working independently, and have at least 2 years of experience in the technology required for extraction, purification and characterization of proteins from natural and recombinant sources. Experience in the HPLC of proteins and peptides is highly desirable.

Cistron Biotechnology is actively pursuing the characterization of the biologically active regions of Interleukin-1 and receptors for IL-1. This program coordinates in-house research as well as collaboration with several university labs. Publication of results is encouraged.

Cistron offers competitive salaries and excellent benefits. Interested individuals should send resumes to: **Cistron Biotechnology, Box 2004, Pine Brook, NJ 07058.**

Research Scientist— Human Kinetics

Drug Metabolism Research is seeking a dynamic scientist to join a newly formed Human Kinetics section. As a member of an interdisciplinary team, the candidate will be responsible for the design and analysis of clinical trials to investigate the pharmacokinetic and pharmacodynamic characteristics of investigational drugs and their metabolites in normal volunteers and patients. Additionally, the incumbent would be responsible for maintaining an independent, laboratory based fundamental research program in drug disposition and biopharmaceutics concepts.

The successful candidate should possess a Ph.D., or appropriate post-doctoral experience, in pharmacology, pharmacokinetics, biochemistry or closely related field. Familiarity with pharmacokinetic/pharmacodynamic modeling approaches and biostatistical principles is essential. Previous experience in the design of clinical pharmacokinetic trials and knowledge of modern bioanalytical techniques is highly desirable. Good oral and written communication skills are required, along with the ability to collaborate effectively with scientists and physicians in other disciplines.

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

For confidential consideration, please call toll free 1-800-253-8600, ext. 3-6767, (inside Michigan call collect 616-323-6767) to request an employment application be sent to you. Please refer to Ad Number 20364-F when calling.



A Century
of Caring
1886-1986

An Equal Opportunity Employer m/f.

POSITIONS OPEN

MARINE BIOLOGIST: Salary \$17,000 per year; 9:00 a.m. to 5:00 p.m. Monday thru Friday. M.S. in Biology and 6 months of experience as marine biologist required. Must be familiar with the use of isotopes. Duties include: planning, designing and performing biological studies in ionophores, fatty acids research, studying the effect of ionophores on growth of fish and marine invertebrates of commercial interest, analyzing data. Submit résumé only to: **Job Service of Florida, 1350 NW 12th Avenue, Room number 280, Miami, FL 33242, reference: Job Order number FL4539525.**

MICROBIOLOGY—ASSISTANT PROFESSOR—The Department of Biology, Millersville University of Pennsylvania, invites applications for a full-time, tenure-track position at the assistant professor level. Requirements include a Ph.D. with specialization in microbiology, and a commitment to, and interest in, teaching undergraduates. Preference will be given to individuals who meet these requirements and have training or experience in molecular biology and/or immunology. The successful candidate will be expected to teach a clinically oriented microbiology course, to participate in introductory biology courses, and to establish an ongoing research program in her/his field. The Biology Department at Millersville University currently has 18 full-time faculty and services approximately 500 majors. Applicants are requested to submit complete curriculum vitae, transcripts, three current letters of reference, and proof of teaching and research effectiveness to: **Dr. K. H. Baker, Chair, Microbiology Search Committee, Department of Biology, Millersville University of Pennsylvania, Millersville, PA 17551.** Screening of applications will begin on 1 December 1986, and continue until the position is filled. *Millersville University is an Equal Opportunity/Affirmative Action Employer.*

MOLECULAR BIOLOGIST (PH.D.)

Full-time faculty position immediately available for recent Ph.D. in biochemistry or related field with a minimum of 2 years of postdoctoral experience. Applicant is expected to have a thorough knowledge of recombinant DNA techniques. A research interest in the molecular aspects of mammalian development is desirable. Salary and rank are commensurate with experience. Applicants are invited to submit curriculum vitae and names of three references to:

**Donald M. Sherline, M.D.
Professor and Chairman
Department of Obstetrics and Gynecology
Medical College of Georgia
Augusta, GA 30912**

Closing date for applications is 1 February 1987.

The Medical College of Georgia is an Affirmative Action/Equal Opportunity Employer.

MOLECULAR BIOLOGIST/MICROBIOLOGIST—Merck Sharp and Dohme Research Laboratories, a world leader in the development of ethical pharmaceuticals for human and animal health, is currently offering excellent career opportunities for a molecular biologist to join the Department of Fermentation Microbiology. Duties will include the application of a broad spectrum of techniques, such as isolation of DNA and RNA, construction and screening of genomic libraries, sequence analysis, and site-directed mutagenesis, to ongoing project involving the molecular biology of *Streptomyces*. An M.S. or B.S. in biochemistry, microbiology, or the equivalent with at least 2 years of experience in molecular biology is required. Previous experience with *Streptomyces* or fungi would be preferred. Excellent salary and benefits programs accompany this position in our new research building in Rahway, NJ. Interested applicants should submit a résumé to: **Mr. Lou Ballester, Merck & Co., Inc., P.O. Box 2000, WBD-214, Rahway, NJ 07065.**

POSTDOCTORAL POSITIONS available immediately for: biochemists, biophysicists and molecular biologists to study (i) the mechanism and regulation of gene expression in both prokaryotic and eukaryotic systems, and (ii) the nucleic acid-protein interactions. Send résumé and three letters of recommendation to: **Professor Cheng-Wen Wu, Department of Pharmacological Sciences, State University of New York (SUNY), Stony Brook, NY 11794.** *SUNY Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer. AK #286.*

POSITIONS OPEN

MOLECULAR DEVELOPMENTAL BIOLOGIST IOWA STATE UNIVERSITY (ISU)

Iowa State University invites applications for a tenured or tenure-track faculty position. We are seeking a developmental biologist using state-of-the-art molecular approaches to study the regulation of gene expression in a developing eukaryotic organism. This position is part of a multimillion dollar, campus-wide effort to emphasize research in molecular biology and biotechnology. It is one of at least 12 molecular biology positions at ISU to be filled in the next 2 years. Modern nucleic acid, protein, and cell sorting facilities with the most advanced equipment available have recently been established. Salary will be negotiable and generous research start-up funds will be available. Modest teaching responsibilities will involve graduate (and advanced undergraduate) courses in molecular developmental biology. Send a description of research interests, curriculum vitae, and a list of three references by 20 January 1987 to: **Dr. Richard Hallberg, Department of Zoology, 339 Science II, Iowa State University, Ames, IA 50011.**

GEORGETOWN UNIVERSITY TENURE-TRACK APPOINTMENT MOLECULAR GENETICS

The Department of Biology, Georgetown University, invites applications for an assistant professorship, effective fall 1987. The appointee will be expected to teach a one-semester undergraduate course in genetics and, in alternate semesters, a graduate course in an area of molecular biology. We seek a promising scientist pursuing significant research in an area of molecular biology. Three letters of recommendation, curriculum vitae, and a description of research interests should be submitted by 1 February 1987 to: **Dr. Joseph H. Neale, Department of Biology, Georgetown University, Washington, DC 20057.** *Georgetown University is an Equal Opportunity/Affirmative Action Employer.*

MOLECULAR IMMUNOLOGIST ASSISTANT/ASSOCIATE PROFESSOR

Applicants for this tenure-track position should have demonstrated potential for developing and sustaining a strong research program in molecular aspects of cellular immunology/regulation/immunogenetics. Research must be suitable for the training of advanced Ph.D. candidates, a number of whom hold the M.D. degree. Teaching responsibilities include selected lectures to medical and dental students, and alternate year offering of a graduate course in a specialty area. Rank of appointment, and salary level commensurate with qualifications. Please submit curriculum vitae, a brief statement of research interests, and the names of at least three references to: **Dr. J. H. Wallace, Chairman, Department of Microbiology and Immunology, University of Louisville Health Sciences Center, Louisville, KY 40292.** *The University of Louisville is an Equal Opportunity/Affirmative Action Employer.*

MOLECULAR VIROLOGIST

The Molecular Biology Department of Zeecon Research Institute is looking for a plant virologist to be involved in a program to genetically alter plants for resistance to viruses.

This position requires a Ph.D. degree, with a postdoctoral and/or industrial experience strongly preferred. Candidates must have experience with standard molecular biology techniques, and will be expected to take an active part in further developing and carrying out an ongoing research program.

Applicants should send curriculum vitae, a statement of research interests, and the names of three references to: **Carole Hurd, Zeecon Research Institute/Sandoz Crop Protection, P.O. Box 10975, Palo Alto, CA 94303-0589.** *We are an Equal Opportunity Employer.*

POSTDOCTORAL POSITION—available December 1986 to study the transferring potential of cellular oncogenes. Preference given to those candidates with experience in molecular biology, cell culture, and/or micromanipulation. Interested candidates should send curriculum vitae and the names of three references to: **Dr. Janet Sawicki, THE WISTAR INSTITUTE, 36th and Spruce Streets, Philadelphia, PA 19104.** *The Wistar Institute is an Equal Opportunity Employer.*

POSITIONS OPEN

NEUROPHYSIOLOGIST

A tenure-track position is open in the Department of Biological Sciences, University of Notre Dame, at the assistant professor level starting 1 September 1987. We seek an outstanding individual with postdoctoral experience and strong funding prospects to conduct an active research program in neurophysiology/neuroendocrinology. Responsibilities include the direction of graduate students and formal teaching at both the undergraduate and graduate levels; specifically a one-semester undergraduate course in introductory mammalian physiology with laboratory, and a graduate specialty course. We offer the successful candidate seed money, a modern research laboratory, outstanding animal care facilities, a competitive salary, and colleagues with complementary research interests. Submit curriculum vitae, names of three references, and a statement of research and teaching interests by 31 January 1987 to: **Dr. Morton S. Fuchs, Department of Biological Sciences, University of Notre Dame, Notre Dame, IN 46556.** *Notre Dame is an Affirmative Action/Equal Opportunity Employer.*

CHEMICAL OCEANOGRAPHY. Tenure-track, assistant professor position in marine or atmospheric geochemistry available fall 1987. The position offers a 9-month, state-funded salary, mainly graduate level teaching, and the opportunity to develop a vigorous research program in a very congenial atmosphere. Send curriculum vitae, statement of research interests, and names of three references to: **CHAIRMAN, Chemical Oceanography Search Committee, Department of Oceanography, The Florida State University, Tallahassee, FL 32306; telephone: 904-644-6700.** *The Florida State University is an Equal Opportunity/Affirmative Action Employer.*

PLANT COMMUNITY ECOLOGIST. Tenure-track, assistant professor, to begin fall 1987. Candidates with strong interests in quantitative approaches toward community ecology, with excellent statistical and quantitative skills, will be given preference. The successful candidate will be expected to teach general undergraduate and specialized graduate courses, develop a fundable research program in terrestrial ecology, and interact with students and faculty in systematics and ecosystem, physiological, and population ecology. Send curriculum vitae, statement of research interests, relevant reprints, and names, addresses, and telephone numbers of at least 3 references to: **Dr. Richard Spellenberg, Department of Biology, New Mexico State University, Las Cruces, NM 88003; telephone: 505-646-3732,** before 15 January 1987. *New Mexico State University is an Affirmative Action/Equal Opportunity Institution.*

PLANT EVOLUTION

The Department of Botany of the University of Texas at Austin invites applications for a tenure-track faculty position, rank negotiable, available 1 September 1987. Individuals specializing in the areas of population genetics, evolutionary mechanisms, and evolutionary theory of angiosperms are encouraged to apply. The successful candidate will be expected to maintain a vigorous, independent research program, and contribute to the graduate and undergraduate teaching activities of the department. Send curriculum vitae, statements of research and teaching interests, reprints, and at least three letters of reference by 31 December 1986 to: **Dr. D. A. Levin, Chairman, Search Committee, Department of Botany, University of Texas, Austin, TX 78713.** *The University of Texas is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL ASSISTANT INVESTIGATOR

Required immediately for studies in identification and characterization of genes of blood group antigens. Background in biochemistry, immunology, molecular biology, and DNA recombinant technology is essential. Applicant will join an active research program in recombinant DNA technology. Competitive salary, excellent benefits. Send curriculum vitae and letters of references to: **Dr. Oscar Pogo, Head, Department of Cell Biology, L. F. Kimball Research Institute of the New York Blood Center, 310 East 67 Street, New York, NY 10021.**

Equal Opportunity Employer

SCIENCE, ENGINEERING AND DIPLOMACY FELLOWSHIP

Applications Invited

The American Association for the Advancement of Science (AAAS), in cooperation with the Agency for International Development (AID) and the Department of State (STATE) is seeking applicants for two or more Science, Engineering and Diplomacy Fellowships. Fellows will spend 1 year, beginning 1 September 1987, working either in the Bureau of Oceans and International Environmental and Scientific Affairs of the Department of State or in one of several Bureaus of the Agency for International Development. Other assignments may also be possible.

Prospective fellows must demonstrate exceptional competence in some area of science or engineering, be flexible, have some experience and/or a strong interest in applying knowledge toward the solution of problems in the area of foreign affairs, and have a Ph.D. or equivalent in years of experience. Awardees will work on scientific and technical subjects in international affairs: foreign policy for STATE and international development for AID. In general, individuals are urged to apply from any area of physical, biological, behavioral, and social science and engineering and whose experience and training is applicable to any one of the following areas: food and agriculture; health and population; nuclear nonproliferation; scientific exchange; forestry, natural resources and ecology; oceans and fisheries; communications; national security; and human resources and education, among others.

The fellows will serve a 1-year appointment at a salary consistent with education level and experience, if possible, but not exceeding the GS-12 level (beginning at \$32,567). A security clearance process will be initiated after selection. The clearance must be obtained before a selectee can begin work in the State Department or AID and the fellowship award is contingent upon the selectee obtaining this clearance.

Deadline for receipt of application is 15 January 1987. For more information and application details, write:

Science, Engineering and Diplomacy Fellows Program
American Association for the Advancement of Science
1333 H Street, NW
Washington, DC 20005

Applied Biotechnology Scientist

Baxter Travenol Diagnostics Inc. has a number of opportunities available for people to work in our Applied Biotechnology group located in Cambridge, MA.

We are looking for individuals with a Ph.D. or equivalent and experience in either nucleic acid sequencing or in the development of immunoassays.

Company offers competitive salaries and an excellent benefits package. Please send resume to Debbie Paris Harmon.

600 Memorial Drive
Cambridge, MA 02139

An equal opportunity employer.

**Baxter Travenol
Diagnostics, Inc.**



DIRECTOR, COGNITIVE AND NEURAL SCIENCES DIVISION

The Office of Naval Research (ONR) is seeking an outstanding individual to serve in this Civil Service position in the Senior Executive Service. Salary range is \$61,296 to \$68,700, depending on qualifications. In addition to salary, career SES appointees are eligible to compete for performance awards and bonuses.

The Director, Cognitive and Neural Sciences Division is responsible for providing leadership, coordination and direction for ONR's \$16M fundamental and applied research programs in the fields of personnel and training research, cognitive psychology, decision making, engineering psychology, computational physiology and perception, neural plasticity, manpower research and man-machine systems technology. The Division Director is the scientific administrator of ONR R&D activity in the described fields with full responsibility for staffing his/her program, establishing overall priorities and procedures,

and recommending change in program objectives and policies to the Director, Life Sciences Directorate. The Director serves as the principal consultant to the Navy on developing naval applications in cognitive and neural sciences.

Candidates should possess a Ph.D. or equivalent and significant experience in both behavioral and central nervous system basic research with emphasis in at least one of the following areas: cognitive psychology, neuro-psychology, psychobiology/neurobiology and sensory physiology. Considerable experience in the administration and management of research and its application to development is required.

Interested persons should submit a resume or Standard Form 171, Application for Federal Employment (available at Federal Job Information Centers or from the address below) to:

Office of the Chief of Naval Research
Civilian Personnel Division, Code 01242P
Attn: Announcement #86-94 (S)
800 North Quincy Street
Arlington, VA 22217-5000



Applications will be accepted through 13 February 1987 and must be received by that date. Applicants are requested to complete the appropriate supplemental forms. For further information and supplemental forms, please call (202) 696-4705.

U.S. Citizenship Required

An Equal Opportunity Employer

POSITIONS OPEN



SCIENCE AND TECHNOLOGY POLICY SPECIALIST

The Soviet and East European Affairs Program of the National Research Council is seeking a SENIOR PROGRAM OFFICER to direct the development and implementation of science and technology policy programs for the Soviet Union and Eastern Europe. Special areas of interest include productivity of R&D organizations, impact of economic policies and technological performance, and environmental policies. The program includes exchanges of science policy specialists, bilateral science and technology policy workshops, and support information services. The incumbent will develop the conceptual framework, supervise preparation of reports, and prepare articles for publication. An advanced degree or equivalent in science or engineering is required; a Ph.D. is preferred. Demonstrated oral and written communication skills and 2 years of experience in the field of science and technology policy or economic analysis are required. Experience in assessing interactions of economic policies and technological performance in the industrial sector, and experience in Soviet or East European affairs and fluency in one or more of the languages of the area are desired. Applicants should submit a résumé, including names of two references to: **Position number 220.149, National Research Council, 2101 Constitution Avenue, NW, Washington, DC 20418.** U.S. citizenship required. *An Equal Opportunity Employer.*

POSITION IN COMPUTATIONAL VISION

The newly formed Department of Cognitive and Linguistic Sciences at Brown University seeks to fill a tenure-track assistant professor faculty position in the area of computational vision starting 1 July 1987. Applicants with a background in computational approaches to biological vision will be given preference. Experience in the behavioral study of perception is also desirable. Ph.D. is required. Applicants should send curriculum vitae, recent reprints, statement of research interests, and three letters of reference to: **James Anderson, Chair, Search Committee, Department of Cognitive and Linguistic Sciences, Box 1978, Brown University, Providence, RI 02912,** before 15 December 1986.

Brown University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW—The Dana-Farber Cancer Institute is seeking to fill one research position at the postdoctoral level to analyze candidate antiretroviral agents for inhibition of specific retroviral functions *in vitro* and *in vivo* in animal systems. Opportunity to gain experience in retrovirology. Knowledge of toxicology, pathology, or immunology desirable. Joint appointment will be in an appropriate department of Harvard Medical School. Please send curriculum vitae and names of three references to: **R. M. Ruprecht, M.D., Ph.D., Division of Cancer Pharmacology, DANA-FARBER CANCER INSTITUTE, 44 Binney Street, Boston, MA 02115.** *An Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITIONS MOLECULAR PATHOGENESIS

Fellowships available immediately to study molecular mechanisms of pathogenesis of coronaviruses and arenaviruses. Training or experience in molecular biology or virology is essential. Salary level commensurate with qualifications.

Applicants should submit curriculum vitae and names of three references to: **Dr. Michael J. Buchmeier, Department of Immunology (IMM5), Scripps Clinic and Research Foundation, 10666 North Torrey Pines Road, La Jolla, CA 92037.**

POSTDOCTORAL POSITIONS available for research projects in the area of pulmonary immunology. Applicants should have experience in microbiology, cellular immunology, biochemistry, or molecular biology. Submit curriculum vitae and three letters of recommendation to: **Joan Stein-Streilein, Ph.D., Associate Professor of Medicine (R-47), University of Miami School of Medicine, P.O. Box 016960, Miami, FL 33101.**

POSITIONS OPEN

NMR IMAGING AND SPECTROSCOPY—Experienced NMR scientist to join the radiology faculty of the University of Texas in San Antonio. State funded, assistant or associate professor level, depending on qualifications. Contact: **G. D. Fullerton, Ph.D., Chief, Radiological Sciences Division, Radiology Department, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78284.** *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL ASSOCIATE

Research in Gastric Carcinogenesis. The Division of Comparative Medicine at the Massachusetts Institute of Technology has an immediate opening for a postdoctoral associate position to conduct research on intragastric nitrosation and predicative modeling of gastric carcinogenesis in laboratory animals. Responsibilities include assisting in surgery and preparation and analysis of biological specimens for biochemical analysis. The qualified applicant should have experience with laboratory animal surgery and manipulation, training in physiology, and knowledge of techniques for biochemical evaluation. A D.V.M. degree or equivalent is required. Applications and the names of three references should be addressed to: **Dr. James G. Fox, Professor and Director, Division of Comparative Medicine, Massachusetts Institute of Technology, 37 Vassar Street, 45-105, Cambridge, MA 02139.** *MIT is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION is available for a biology-trained person at the Chemistry Department. A Ph.D. in biology, cell biology, or molecular biology is required, to work in the applications and development of a novel type of optical microscope. The person should have a good training in *in vitro* growth of mammalian cells, chromosome isolation techniques, experience with traditional optical microscopy including: expertise in staining and fixation procedures, immunofluorescence methods, *in vitro* hybridization and generation of monoclonal antibodies. A general knowledge of basic spectroscopy would be desirable, but not essential for the job. The position is available for a minimum period of 2 years and will involve collaborations with the University of New Mexico Medical School. Send curriculum vitae to: **Professor Carlos Bustamante, Chemistry Department, University of New Mexico, Albuquerque, NM 87131.** Telephone: 505-277-3926.

POSTDOCTORAL POSITION VIRAL PATHOGENESIS

Position available to study the immunopathology of Theiler's virus infection of mouse. This demyelinating animal disease is one of the best available models for multiple sclerosis. Applicants should have solid training in cellular immunology. Send curriculum vitae, brief statement of research goals, and names of three references to: **Michel Brahic, Department of Virology, Institute Pasteur, 75724 Paris Cedex 15 France.**

POSTDOCTORAL POSITIONS

American Biogenetic Sciences, Inc., is a new biotechnology company located on the campus of the University of Notre Dame. The company has postdoctoral positions available immediately in the following areas:

Protein Biochemistry

This position will involve the characterization of recombinant proteins generated in prokaryotic and eukaryotic systems. Knowledge of recombinant DNA technology and tissue culture techniques is desirable.

Immunochemistry

This position will involve the development and characterization of monoclonal antibodies. Knowledge of protein biochemistry hybridoma technology and mammalian tissue culture is desirable.

Molecular Biology

This position involves the study of gene expression in viral expression vectors. Experience in characterization and manipulation of cloned genes is desirable.

Interested candidates should send a description of their research interests, curriculum vitae, and arrange for three letters of recommendation to be sent to: **Dr. Morris Pollard, Lobund Laboratory, University of Notre Dame, Notre Dame, IN 46556.**

POSITIONS OPEN

POSTDOCTORAL POSITION to study effects of alcohol on central neurons during aging. Experience in microscopy desirable. Training in computer-assisted analyses provided. Two-year position starting April 1987. Salary: \$16,000. Send curriculum vitae, summary of research goals, and names of three references to: **Dr. R. Pentney, Department of Anatomical Science, State University of New York at Buffalo (SUNYAB), Buffalo, NY 14214,** by 15 January 1987. *The Research Foundation of the State University of New York is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION

The Agrobiochemical Research Department of Dr. R. MAAG Ltd. has an opening for a Ph.D. scientist in its group for fungal metabolism.

Candidates should have research experience in sterol metabolism and/or fungal cell wall synthesis. The individual will be a member of a group of four to five persons, engaged in the search for novel, specific inhibitors of cell wall or cell membrane formation in plant pathogens.

Willingness to cooperate with colleagues and performance are expected from applicants.

The appointment is limited to 2 years (without extension possibilities) and is dependent on a work permit which has to be issued by the Swiss authorities.

Applications should be submitted to:

**Dr. R. MAAG Ltd.
Attention: Personalchef
CH-8157 Dielsdorf
Switzerland**

POSTDOCTORAL POSITION in neurobiology available immediately to study the effects of acetylcholinesterase inhibition on neuromuscular transmission. Training in biophysics, physics, or experience in electrophysiological recording from single cells is desirable. Send curriculum vitae and names of three references to:

**Dr. E. G. Henderson
Department of Pharmacology
University of Connecticut Health Center
Farmington, CT 06032**

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

POSTDOCTORAL POSITIONS IN VISION are available within the Vision Group at Northwestern University. Research foci include motion perception, binocular vision, vision and aging, or computational vision. Experience in computer programming and psychophysics desirable. Send curriculum vitae and three references to: **Drs. Robert Sekuler and Randolph Blake, Department of Psychology, Cresap Neuroscience Laboratory, Northwestern University, Evanston, IL 60201.** *An Equal Opportunity Employer.*

POSTDOCTORAL RESEARCH ASSOCIATE CELLULAR ENDOCRINOLOGY

AVAILABLE IMMEDIATELY. To study control of hormone secretion at the single-cell level by use of reverse hemolytic plaque assays in combination with other modern biochemical and microscopic techniques. Ongoing projects include: (i) ontogeny and functional interconversion of growth hormone and prolactin secreting cells, (ii) differential regulation of hormone release from cells that simultaneously release both of these hormones, and (iii) molecular heterogeneity of secreted forms of hormone. Salary is very competitive and commensurate with experience. Background in cellular or molecular biology and endocrinology is desirable, but not an absolute requirement. Please send curriculum vitae and names of three references to:

**Dr. L. Stephen Frawley
Department of Anatomy and Cell Biology
Medical University of South Carolina
171 Ashley Avenue
Charleston, SC 29425-2203
Telephone: 803-792-3526**

POSTDOCTORAL RESEARCH ASSOCIATES to join an active molecular biology group investigating the production, enzymatic repair, and biological consequences of unique oxidative DNA damages. Send curriculum vitae to: **Dr. Susan Wallace, Department of Microbiology, New York Medical College, Valhalla, NY 10595;** telephone: 914-993-4197.

POSITIONS OPEN

POSTDOCTORAL/RESEARCH ASSOCIATE POSITIONS

The Clinical Olfactory Research Center of the State University of New York (SUNY) Health Science Center at Syracuse has two open positions for a research associate/postdoctorate available 1 December 1986, for at least 2 years. Continuance of position is contingent upon continued funding. The center is seeking investigators interested in pursuing clinical and basic science studies aimed at increasing our understanding of olfactory dysfunction. Minimum qualifications are an M.D. or Ph.D. in one of the sciences or engineering. Send curriculum vitae and two names of references to: **Dr. Maxwell M. Mozell, Department of Physiology, SUNY Health Science Center at Syracuse, 766 Irving Avenue, Syracuse, NY 13210.**

POSTDOCTORAL RESEARCH ASSOCIATE, molecular virology studies of coxsackievirus B3-induced murine acute myocarditis and recombinant viruses generated with cDNA constructions. Experience in molecular biology, recombinant DNA manipulation, and RNA and DNA sequencing is encouraged. Available May 1987. Curriculum vitae and three letters of recommendation to: **David T. Purtilo, M.D., Professor and Chairman, Pathology and Microbiology, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, NE 68105. An Equal Opportunity/Affirmative Action Employer.**

UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

POSTDOCTORAL RESEARCH IN MOLECULAR BIOLOGY OF EXTRACELLULAR MATRIX: Laboratory is using the techniques of molecular biology in investigating the role thrombospondin (TSP) plays in the extracellular matrix of a variety of cells. Previous studies have included work on the structure-function relationships that exist in this large 500-kD molecule [JBC 259, 10100; PNAS 82, 3472; PNAS 82, 3844; JBC 261, 1962]. Recently, I have obtained a cDNA for TSP (PNAS 83, 5449) and have also cloned the gene for it.

Ongoing and future work will involve the study of the TSP gene; expression of TSP domains in both eukaryotic and prokaryotic expression systems, and studies of the regulation of TSP biosynthesis.

Please send a description of research interests, curriculum vitae, and names and telephone numbers of three references to:

**Dr. Vishva M. Dixit, Box 0602
MSRB1 Building, 1150 West Medical Campus Drive
Ann Arbor, MI 48109
Equal Employment Opportunity**

POSTDOCTORAL RESEARCH POSITIONS

Ph.D. in biochemistry or related field to study hormonal regulation of gene expression in a permanent line of rat thyroid cells including (i) identification of hormone-responsive elements of thyroglobulin gene, and (ii) molecular biology of TSH receptor: cloning, expression, gene structure, and site-directed mutagenesis. Two positions available immediately. Send curriculum vitae and two letters of recommendation to: **Dr. S. N. Nayfeh, Department of Biochemistry, School of Medicine, University of North Carolina, Chapel Hill, NC 27514. Telephone: 919-966-2077. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL RESEARCH POSITION MATERIALS SCIENCE HARVARD UNIVERSITY

A postdoctoral research position involving work on artificially layered amorphous materials and ion beam and pulsed laser processing of metals and semiconductors is available in the Division of Applied Sciences. Applicants must have a Ph.D. in materials science and have experience in thin-film deposition, microfabrication, ion beam processing, semiconductor physics, and physics of the amorphous state. Please send curriculum vitae and names of three references to: **Professor Frans A. Spaepen, Pierce Hall 208, Division of Applied Sciences, Harvard University, Cambridge, MA 02138. Harvard is an Affirmative Action/Equal Opportunity Employer.**

RESEARCH ASSOCIATES

An industry leader, **Amgen** develops products for human therapeutics, human diagnostics and animal health care. We have immediate openings for Research Associates with experience in the areas of immunology, biochemistry, and tissue culture.

Responsibilities for one position will include immunoassay development, western blotting, mammalian cell culture including production and maintenance of hybridoma cell lines, protein characterization, and antibody and protein purification. **Dept. 28**

Requirements for the other position include 1-2 years tissue culture experience, and familiarity with basic recombinant DNA and virology techniques. **Dept. 25**

The successful candidates will have a B.S. or M. S. degree in biochemistry or immunology and several years of related experience.

Amgen is located in an attractive community about an hour northwest of Los Angeles, and offers a stimulating and highly paced environment, along with a competitive compensation and benefits package. Qualified candidates should submit a resume, including three references, in confidence to:

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

Equal Opportunity Employer



Neuropharmacologist/ Molecular Neurobiologist

The Neuroscience Department at Pfizer Central Research is initiating a research program to develop a centrally acting agent for the treatment of obesity. A position exists within this group for a neuropharmacologist or molecular neurobiologist interested in applying skills, perhaps gained in other areas of research, to this problem. You must have a PhD and completed a postdoctoral fellowship. The discipline and area of the PhD and postdoctoral research are less important than displaying the creativity necessary to carry out innovative research in the area of appetite control and obesity. You are particularly well suited for this position if you have a molecular biology background and are interested in the practical application of your research skills to the area of neuropharmacology.

This position offers a stimulating professional environment with potential for career growth. We are located in an attractive southeastern Connecticut shore location and offer a competitive salary/benefits package with relocation assistance. Qualified applicants should submit their resume, description of research experience, and references to **Jerry K. Larson, PhD, Manager of Employment, Pfizer Central Research, Eastern Point Road, Groton, Connecticut 06340.**



An equal opportunity employer

POSITIONS OPEN

POSTDOCTORAL RESEARCH POSITION available immediately for study of atrial natriuretic peptide secretion, actions, and metabolism in experimental hypertension and heart failure. Background in renal physiology/pharmacology and radioimmunoassay methodology desirable. Stipend is competitive. Send curriculum vitae and names of references to: **Dr. Ronald H. Freeman, Department of Physiology, MA415 Medical Sciences Building, University of Missouri, Columbia, MO 65212.** *The University of Missouri is an Equal Opportunity Employer.*

TENURED PROFESSOR IN BIOLOGY CURATOR IN HERPETOLOGY

The Department of Organismic and Evolutionary Biology of Harvard University invites applications for a tenured professorship in biology and curatorship in herpetology in the Museum of Comparative Zoology (M.C.Z.). The successful candidate will be required to supervise the maintenance of the herpetological collections of the M.C.Z., although her/his research need not be directly related to the collections. Starting date is 1 July 1988. Send curriculum vitae, proposed research plan, and names of three references by 31 January 1987 to:

**Chairman, Herpetological Search Committee
Department of Organismic and Evolutionary Biology
Harvard University
26 Oxford Street
Cambridge, MA 02138**

Harvard University is an Equal Opportunity/Affirmative Action Employer.

TWO POSTDOCTORAL RESEARCH ASSOCIATE POSITIONS AVAILABLE. (i) to study the molecular basis of the stage-specific invasive and adhesive behavior of human cytotrophoblast (placental) cells. (ii) to study expression of cell adhesion molecules in early mouse embryogenesis. Persons with strong background in immunology/biochemistry, molecular biology, or EM immunocytochemistry will be considered. Stipend \$18,000 to \$22,000. Apply to: **Dr. Caroline Damsky, 681 Health Sciences West, University of California, San Francisco, San Francisco, CA 94143; telephone: 415-476-8922.**

PROFESSOR AND CHAIRMAN OF BIOCHEMISTRY

The Indiana University School of Medicine invites applications from candidates for the chair of biochemistry. The department has responsibility for professional and graduate education in biochemistry and has strong multifaceted research programs relating to basic biochemistry, molecular biology, and the application of biochemical techniques to medicine. The successful candidate will be expected to provide leadership in all phases of the department and in collaboration with programs throughout Indiana University. Candidates should be recognized as outstanding in research, have strong teaching credentials, and have administrative strengths. Applications should include curriculum vitae and names of three references. Nominations are also requested. Screening of applications will begin January 1987. Contact: **Joe C. Christian, M.D., Ph.D., Chairman, Biochemistry Search Committee, Fesler Hall 302, 1120 South Drive, Indiana University School of Medicine, Indianapolis, IN 46223.** Inquiries or nominations may also be made by telephone: 317-274-2241.

Indiana University is an Equal Opportunity Employer, M/F.

DEPARTMENT OF GENETICS HARVARD MEDICAL SCHOOL

The Department of Genetics at the Harvard Medical School is seeking candidates for the position of **PROFESSOR OF GENETICS.** This position, which carries major resources, requires the incumbent to develop a major research and training program in the broad area of molecular genetics. We seek candidates who have demonstrated scholarly achievement and promise that is of the highest order. *We particularly welcome applications from women and minority candidates.* Applicants should submit curriculum vitae, a concise statement of research interests and accomplishments, and the names of four references to: **Dr. Philip Leder, Chairman, Department of Genetics, Harvard Medical School, 25 Shattuck Street, Boston, MA 02115.**

POSITIONS OPEN

MASSEY UNIVERSITY PALMERSTON NORTH NEW ZEALAND PROFESSOR AND HEAD OF DEPARTMENT PHYSIOLOGY AND ANATOMY FACULTY OF VETERINARY SCIENCE

Applications are invited for the above post which will arise when **Professor R. E. Munford** relinquishes his position as head of department at the end of 1986. The successful applicant will be appointed to a chair in either physiology or anatomy. Veterinary qualifications are desirable, but not mandatory.

The appointee will be responsible for the day-to-day administration of the department, the development and organization of its teaching, and the promotion of its research. The appointee will also take part in research and teaching in an appropriate discipline. The department provides undergraduate and postgraduate instruction for students in veterinary science, science, and animal science.

Facilities for both disciplines are of a high standard and opportunities for cooperative research with other university departments and local research institutions are excellent.

Salary is in the range of NZ\$62,000 to NZ\$77,500.

Further details of the university, together with conditions of appointment, may be obtained from: **The Secretary General, Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF, England,** or from **B. R. H. Monks, Registrar,** with whom applications close on 1 March 1987.

OPPORTUNITIES FOR ADVANCED STUDY IN MAMMALIAN REPRODUCTIVE BIOLOGY.

NIH-supported PREDOCTORAL AND POSTDOCTORAL TRAINING OPPORTUNITIES with an interdepartmental, multidisciplinary orientation. Research areas include glycoprotein synthesis and role in implantation (**Carson**), steroid hormones and carcinogenesis (**Jones**), neuroendocrine control of gonadal function in primates (**Knobil**), biosynthesis and function of glycoproteins in differentiation (**Lennarz**), protein transitions in spermatogenesis and reproductive toxicology (**Meistrich**), control of placental blood flow and fetal cardiac output (**Parisi**), molecular mechanisms controlling spermatogenesis and uterine relaxation (**Sanborn**), cell interactions during fertilization and early development (**Shur**), Sertoli cell function and regulation of testicular functions (**Steinberger**), receptor-chromatin interactions and testicular polyamine metabolism (**Tsai**), placental prostaglandins in hypertension, pregnancy, and labor (**Walsh**), and chemistry of glycoprotein hormones and inhibin (**Ward**). Send inquiries to: **Dr. B. Sanborn, Director, Training Program in Mammalian Reproduction, Department of Biochemistry and Molecular Biology, University of Texas Medical School at Houston, P.O. Box 20708, Houston, TX 77225.**

The University of Texas is an Equal Opportunity Employer.

PROTEIN CHEMIST

An opportunity is available for a biochemist with experience in protein structure studies. Candidate must have a doctoral degree in biochemistry and a minimum of 5 years of experience in the field of protein chemistry. Must be accomplished in the preparation of proteins and peptides by modern HPLC methods and the analysis of their composition and primary sequence. Must be experienced in the use of gas phase sequencer. Must be experienced in the use of computers to predict structure. Position is located in the Division of Medical Genetics, Department of Pediatrics, University of Southern California at Childrens Hospital of Los Angeles. Joint appointment in biochemistry is available. Excellent opportunities are available for collaboration and extension of interests to challenging cell biologic questions of protein translocation and membrane integration. Salary, academic rank, and tenure status are determined by experience and record of productivity. Send curriculum vitae, representative publications, statement of research interests, and names of three references to: **John A. Barranger, M.D., Ph.D., Head, Division of Human Genetics, Childrens Hospital of Los Angeles, 4650 Sunset Boulevard, Los Angeles, CA 90027.** *Childrens Hospital of Los Angeles and the University of Southern California are Affirmative Action Employers.*

POSITIONS OPEN

RESEARCH ADMINISTRATOR

The Alzheimer's Disease and Related Disorders Association invites applications for executive secretary to the Medical and Scientific Advisory Board (MSAB). The executive secretary will administer a \$2-million-plus extramural research program, evaluate educational materials, function as in-house spokesperson, and develop and maintain contacts with federal/professional/scientific organizations. Applicants must have Ph.D. in science relevant to aging, neuroscience, Alzheimer's disease, or related disorders; training and/or experience in medical/scientific research administration; excellent oral and written communication skills; and ability to work effectively with laypersons, as well as physicians and scientists. Salary competitive. Send curriculum vitae, three letters of reference, and letter of inquiry by 2 January 1987 to: **MSAB Services, ADRDA, 70 East Lake Street, Suite 600, Chicago, IL 60601.**

RESEARCH ASSISTANT PROFESSOR

The Mary Babb Randolph Cancer Center of West Virginia University School of Medicine invites applications for a research assistant professor with responsibility for daily operation of a new Protein Analysis and Monoclonal Antibody Core Facility. A strong background in protein analysis is essential. The successful applicant will be expected to initiate and carry out projects involving protein purification, protein sequencing, and peptide synthesis and will oversee the production and characterization of monoclonal antibodies. A joint appointment in biochemistry is available to qualified candidates. Competitive salary commensurate with qualifications will be offered. Send curriculum vitae and arrange for three letters of reference to be forwarded to: **Dr. Bruce Caterson, Department of Biochemistry, West Virginia University School of Medicine, Morgantown, WV 26506.**

RESEARCH ASSISTANT—duties include maintenance of algal chemostat cultures, photophysiology experiments, and participation in oceanographic cruise. Experience in microbiological and biochemical techniques preferable. Position available immediately; salary commensurate with experience. Send résumé and names of references to: **Dr. H. Glover, Bigelow Laboratory for Ocean Sciences, McKown Point, West Boothbay Harbor, ME 04575.** *An Equal Opportunity Employer.*

RESEARCH ASSISTANT PROFESSOR position is available for Ph.D. to participate in ongoing studies on the cellular physiology of platelet forms of plasma proteins. Professional background in peptide or protein chemistry, cell culture, immunochemistry, or molecular biology required. Please send curriculum vitae and names of three references to: **Alvin H. Schmaier, M.D., Thrombosis Research Center, Temple University School of Medicine, 3400 North Broad Street, Philadelphia, PA 19140.** *Equal Opportunity/Affirmative Action Employer.*

RESEARCH ASSISTANT PROFESSOR: The University of Virginia, Department of Internal Medicine is seeking a candidate to supervise a research laboratory on hormonal control of blood pressure. Candidates must hold a Ph.D. and have prior experience in cell and molecular biology. Please send curriculum vitae and references to: **Dr. Robert M. Carey, Box 482, Department of Internal Medicine, University of Virginia, Charlottesville, VA 22908.** *The University of Virginia is an Equal Opportunity Employer.*

RESEARCH ASSOCIATE

A research position is available in the area of in vitro fertilization and reproductive immunology. Studies include biochemical and immunological analyses of sperm autoantigens, sperm-egg interaction, T-cell antigens, and sperm plasma membranes. Applicants should have a recent Ph.D. and a strong background in immunology, biochemistry, and reproductive biology. Send curriculum vitae and the names of three references to: **Dr. Michael G. O'Rand, Laboratories for Cell Biology, Department of Anatomy, University of North Carolina at Chapel Hill, Chapel Hill, NC 27514.**

University of North Carolina—Chapel Hill is an Affirmative Action/Equal Opportunity Employer.

BUILDING A NEW LAB?

LET THE SCIENCE FREE PRODUCT
INFORMATION SERVICE PUT YOU IN
TOUCH WITH THE VENDORS WHOSE
PRODUCTS YOU WILL NEED.

SIMPLY WRITE US A LETTER STATING
THE SPECIFICS ABOUT YOUR PROPOSED
LAB AND WE WILL DO THE REST.

WRITE TO:

SCIENCE MAGAZINE
NEW LAB SERVICE DEPT.
1515 BROADWAY
NEW YORK, N.Y. 10036

RESEARCH SCIENTIST/ ENGINEER

At MIT's Laboratory for Information and Decision Systems. The primary responsibility will be to coordinate activity between scientists and engineers at MIT, Brown University and Harvard University, who are involved in the newly formed Center for the Study of Intelligent Control Systems. The research scientist/engineer will also foster communication between the Center and the Army Research Laboratories. Requirements include an advanced degree in mathematics, engineering and/or physics. Experience with budgets and contract reporting desirable.

To apply, send two copies of resume to the
MIT Personnel Office, E19-239, 77 Massa-
chusetts Avenue, Cambridge, MA 02139,
Attn: job # R86-130.

MIT is an equal opportunity/
affirmative action employer

MIT

Medicinal Chemistry

The Medicinal Chemistry Department of SK&F Laboratories located in a new, state-of-the-art research facility near Valley Forge, PA has several positions available for scientists interested in elucidating specific biochemical systems as therapeutic targets. The selected individuals will be involved with the isolation and characterization of enzymes; design and discovery of enzyme inhibitors; and mechanism-of-action studies with putative therapeutic agents. Candidates must possess the following:

ASSOCIATE SENIOR INVESTIGATOR: Ph.D. in a biorganic chemistry or related discipline; experience with enzyme kinetics and reaction mechanisms; enzyme purification, characterization and assay experience involving separation and spectrophotometric techniques; experience with techniques used to elucidate enzyme reaction mechanisms including the use of radioisotopes; postdoctoral experience in enzymology and experience with recombinant DNA techniques preferred.

SCIENTIST: M.S. in Biochemistry, or equivalent, with at least one year of experience or B.S. in Chemistry, or equivalent, with at least 4 years of experience with enzyme assays; at least one year of experience in enzyme isolation; some experience in aseptic technique; experience in virology or eukaryotic cell culture is preferred.

ASSOCIATE SCIENTIST: B.S. or equivalent in Biochemistry or related discipline; familiarity with enzyme assays and DNA labelling techniques; at least one year experience with protein/enzyme purification and characterization; experience in modern analytical techniques including electrophoresis and HPLC; working knowledge of biochemical reaction mechanisms; preferred experience with DNA dependent enzymes and recombinant DNA techniques.

ASSOCIATE SCIENTIST: B.S. or equivalent in a life science; minimum of 2 years experience in mammalian cell culture and working knowledge of current concepts in mammalian cell physiology; experience with proper techniques for handling and use of radioisotopes; at least two years familiarity with basic principles of pharmacology; preferred experience in mechanisms of cell death, DNA breakage and repair, and enzymology.

We offer an excellent compensation, benefits and relocation package as well as the opportunity for personal and professional growth. Please reply in confidence to: George P. Kissell, Jr., Manager, Personnel Relations, Smith Kline & French Laboratories, 1598 Spring Garden Street, Philadelphia, PA 19101. We are an equal opportunity employer M/F/H/V.

SK&F

A SmithKline Beckman Company

POSITIONS OPEN



RESEARCH ASSOCIATE

Nova Pharmaceutical Corporation is inviting applications for a position at the research associate level or higher within an expanding CNS Pharmacology Group. The successful candidate must possess a Ph.D. and have a minimum of 2 years of academic postdoctoral or industrial experience. Individuals with training in neurochemistry, biochemistry, or pharmacology are encouraged to apply. However, those applicants with a demonstrated understanding of amino acid neurotransmission are preferred. The position will require both in vitro and whole animal investigations, supervision of a small group of technical associates, and excellent written and oral communications.

Nova Pharmaceutical Corporation is an Equal Opportunity Employer, offering a very competitive benefits package and a challenging work environment. Interested individuals should forward their résumé, along with a cover letter detailing specific interests and three references, to:

Personnel Department
Maria Kenaley

NOVA PHARMACEUTICAL CORPORATION
5210 Eastern Avenue
Baltimore, MD 21224-2788

Deadline for applications is 21 December 1986.

RESEARCH ASSOCIATE—to carry out studies in vertebrate retina. Requires experience in HRP intracellular staining in vertebrate retinal neurons, ultramicrotomy light and electron microscopy, autoradiography, and immunocytochemistry. Should be familiar with the use of electron microscopes, computers, and reconstruction techniques. Must have Ph.D. or equivalent in life science. Salary according to NIH postdoctoral scale (\$18,000 to \$22,000), based on years of experience. Send curriculum vitae with names of three references to: **Box 212, SCIENCE. An Affirmative Action/Equal Opportunity Employer.**

RESEARCH ASSOCIATE VIRAL CARCINOGENESIS LABORATORY LINUS PAULING INSTITUTE

A postdoctoral position is available to work on the genetic mechanism of oncogene activation associated with herpesvirus-induced neoplastic transformation. For details on the experimental model, see our recent publications [*Proc. Natl. Acad. Sci.* 83, 1738-1742, and 7855-7859; *J. Virol.* 60, 645-652 (1986)]. Applicants must have a Ph.D. in molecular biology/virology with a strong background in genetics. Previous experience in areas such as molecular cloning, construction of genomic or cDNA libraries, and DNA sequencing is essential. Preference will be given to candidates with firsthand experience in the molecular and structural analysis of eukaryotic genes. Send curriculum vitae with a brief summary of research experience to: **Dr. R. J. Jariwalla, Head, Viral Carcinogenesis Program, Linus Pauling Institute of Science and Medicine, 440 Page Mill Road, Palo Alto, CA 94306. An Equal Opportunity and Affirmative Action Employer.**

RESEARCH SCIENTIST IN PLANT BIOTECHNOLOGY in The Plant Genetics Department at Advanced Genetic Sciences (AGS) has an immediate opening for a plant cell biologist. You will have the responsibility of developing plant transformation systems in horticultural crops and of interacting with geneticists and molecular biologists. AGS is a leader in agricultural biotechnology, offering an exciting research environment with excellent and diverse scientific colleagues and state-of-the-art technologies. AGS is centrally located in the San Francisco Bay Area, providing access to a wide variety of valuable scientific and cultural resources. Send curriculum vitae, including names, addresses, and telephone numbers of at least three professional references to: **Dr. Richard Jorgensen, Advanced Genetic Sciences, Inc., 6701 San Pablo Avenue, Oakland, CA 94608.**

POSITIONS OPEN

Immediate opening for a **RESEARCH ASSOCIATE** with a background in carbohydrate chemistry to study immune response to polysaccharide antigens. Background in tissue culture preferred. Send a résumé, a letter describing interests, and telephone numbers of three references to: **C. Lucy Park, M.D., Department of Pediatrics, Box 133, University of Chicago, Chicago, IL 60637.**

SHANNON POINT MARINE CENTER (SPMC) Western Washington University

SABBATICAL SUPPORT PROGRAM. SPMC invites applications for visiting faculty on sabbatical leave from home institutions. Funds are available 1 July 1987, to match salary up to \$15,000 (including fringe). Additional salary support funds pending budget approval. Support for individuals not requiring salary includes boat time, laboratory space, and supplies. Applications accepted until position filled. For more information and application procedures, write: **Dr. Stephen Sulkin, Professor and Director, Shannon Point Marine Center, 1900 Shannon Point Road, Anacortes, WA 98221.**

SCIENCE ASSOCIATES: The Environmental Defense Fund (EDF), a national public interest environmental group is seeking applicants for two **Science Associate Positions**. Scientist will work in teams with other EDF scientists and lawyers. Well-developed written and oral skills helpful. Interdisciplinary experience useful.

Boulder, Colorado, office seeking recent Ph.D. to work on regional ground-water problems. The position is a 1-year appointment starting 1 January. Candidates should have degree and experience in associated field and some computer experience. Submit résumés, a letter describing qualifications, and a writing sample to: **Jane Ceraso, 444 Park Avenue South, New York, NY 10016.**

Washington, D.C., office seeking **Environmental Scientist/Engineer** for its Toxic Chemicals Program. Position concentrates on hazardous waste management and disposal, using sound science to improve toxic chemical regulation. Candidate should possess broad training in the environmental sciences, with advanced coursework/experience in environmental engineering, chemistry, biology, soil science, toxicology and statistics, and one area of advanced study. Requires a master's degree plus 3 years of experience or equivalent. Send résumé and writing sample to: **Ellen Silbergeld, 1616 P Street, NW, Washington, DC 20036.**

SENIOR RESEARCH FELLOW APPOINTMENTS AT THE UNIVERSITY OF CALIFORNIA, BERKELEY

Pending budgetary approval, one or two renewable 3-year appointments may be made by the Space Sciences Laboratory to theoretical space plasma physicists. These positions offer principal investigator status and the awardees are expected to obtain financial support for their salary and research programs. A proven record of work with experimentalists in data interpretation by computer simulations and/or analytical theory is a prerequisite, as is a strong commitment to student training.

Curriculum vitae, bibliography, statement of prospective research, and the names of three people who can provide meaningful letters of recommendation should be sent by 31 December 1986 to: **Professor C. F. McKee, Director, Space Sciences Laboratory, University of California, Berkeley, CA 94720. The university is an Affirmative Action/Equal Opportunity Employer.**

TECHNICAL MANAGER—Purina Mills, Inc., is seeking a broadly skilled and experienced person as a technical manager for its Special Chow Business Group. Excellent communication, organization, and interpersonal skills are essential. To qualify, the person must have completed a Ph.D. with depth of training in animal science/biochemistry/nutrition and have five or preferably more years of experience. A broad knowledge of animals/fish/birds relative to their nutritional needs, biochemical systems, and management needs is ultimately an asset for this position. Salary and benefits will be commensurate with training and at competitive levels. For confidential consideration, send your résumé to: **J. A. Witte, Human Resource Department, PURINA MILLS, INC., 800 Chouteau Avenue, St. Louis, MO 63164. An Equal Opportunity Employer.**

POSITIONS OPEN

SENIOR RESEARCH POSITION

As section head at University Hospital. Experienced cell biologist, with strong immunochemical or biochemical background to participate in research on pathogenetic aspects of human carcinoma glycoconjugates. Doctorate and active benchwork experience essential. Excellent salary and benefits. Send curriculum vitae, details of expertise, and bibliography to: **G. F. Springer, M.D., Director, Immunochemistry Research, Evanston Hospital, 2650 Ridge Avenue, Evanston, IL 60201. Equal Opportunity Employer, M/F.**

TUMOR IMMUNOLOGY: National Cancer Institute (NCI), National Institutes of Health (NIH), Public Health Service is seeking applicants to join a research group involved in the generation and utilization of novel monoclonal antibodies directed against human tumor antigens. Group is also involved in the generation and utilization of recombinant immunoglobulins and anti-idiotypic monoclonals, and tumor-antigen characterization. Applicants should have a Ph.D. or M.D. or extensive experience with a strong background in one or more of the following: immunochemistry, glycoprotein chemistry, hybridoma technology, and cell-mediated immunity. Salary commensurate with experience. Send curriculum vitae, bibliography, and names of reference to: **Jeffrey Schlom, NCI/NIH, Building 10, Room 8B07, 9000 Rockville Pike, Bethesda, MD 20892. U.S. citizenship and/or permanent residency required, depending upon type of appointment. An Equal Opportunity Employer.**

University of Georgia/Environmental Protection Agency (UGA/EPA) VISITING SCIENTIST PROGRAM—The University of Georgia and EPA's Environmental Research Laboratory are seeking a visiting senior scientist to work collaboratively in Athens, Georgia, with the university and EPA for a 6-month period beginning 1 April 1987. Three possible areas of research are expert systems, anaerobic microbial transformations, and metal reactions in the environment. Salary (6 months) is \$28,000, plus health care benefits. Please submit by 15 January 1987, a letter of interest indicating your research area of preference and curriculum vitae to: **Patsy Songer, Office of the Vice President for Research, Graduate Studies Research Center, Room 610, University of Georgia, Athens, GA 30602.**

VIROLOGIST/IMMUNOLOGIST

Emory University seeks candidates for a joint appointment as an assistant professor in the School of Medicine as a core staff scientist with faculty rank at the Yerkes Regional Primate Research Center. The successful candidate will be responsible for the development of an active research program in primate virology/immunology, with emphasis on retroviruses and other immunosuppressive viruses.

Candidates should send a letter of application, curriculum vitae, and three professional references to: **Dr. Frederick A. King, Director, Yerkes Primate Center, and Chair, Search Committee for Virologist/Immunologist, Emory University, Atlanta, GA 30322.**

Deadline for receipt of applications is 15 December 1986.

Emory is an Equal Opportunity Employer

WILDLIFE ECOLOGIST

The School of Forestry and Environmental Studies, Yale University, invites applications for a term appointment in wildlife ecology. Applicants must have completed a Ph.D. degree and show evidence of strong research and teaching ability. We seek an individual who will develop funding for a strong research program and will be effective in the teaching and supervision of masters and doctoral candidates. Applicants should send curriculum vitae, three letters of recommendation, and a statement of current and future research interests to:

**Dr. Richard S. Miller
School of Forestry and Environmental Studies
Yale University
New Haven, CT 06511**

Deadline for applications is 1 January 1987. *Yale University is an Equal Opportunity/Affirmative Action Employer.*

Research

...to build a better tomorrow

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

Protein Purification/ Characterization

We are looking for two Ph.D. level protein biochemists to work on the purification and characterization of novel protein pharmaceuticals produced through recombinant DNA technology. One position will be responsible to head a lab and requires several years' postdoctoral experience; the other is a staff scientist position requiring 0-3 years' postdoctoral experience. The ideal candidates for both positions will have a strong background in small and large scale bioseparation techniques (including conventional chromatography, HPLC/FPLC and immunoaffinity chromatography). Additional experience exploring the structure-function relationships of proteins by physical or chemical means is also desirable.

Protein Chemistry

We currently have an opening for a talented research associate to join our group working on the structural characterization of recombinant DNA proteins. The ideal candidate will have a B.S. or M.S. degree in Biochemistry or related science with expertise in amino acid analysis, peptide mapping and gas phase sequencing of proteins. A background in exploring functional domains in enzymes and glycoprotein hormones would be helpful.

Genetics Institute offers a stimulating scientific environment in addition to excellent salary, equity participation and a complete benefits package. Qualified candidates should forward their resumes, in confidence, to Barbara Covell, Personnel Manager, Genetics Institute, 87 Cambridge Park Drive, Cambridge, MA 02140.

Genetics Institute

BIOCHEMISTS/ MICROBIOLOGISTS

• **San Diego** •

HYBRITECH INCORPORATED, the recognized leader in monoclonal antibody-based immunodiagnostics, is in need of Research Scientists and a Sr. Research Associate for the following two R&D positions:

RESEARCH SCIENTIST—Ideal candidates will have experience working with viral or bacterial agents in the development of immunoassays for infectious diseases. Responsibilities will include antigen/antibody characterization and evaluation, immunoassay optimization, and clinical evaluation. Ph.D. in microbiology or a related science and two or more years of post doctoral experience working with viral agents required.

SR. RESEARCH ASSOCIATE—Candidates should have industrial experience working with viral antigens in the development of immunoassay products. The successful candidate will have a M.S. degree in a related science or equivalent, two or more years of industrial experience and previous supervisory responsibilities.

Hybritech offers a stimulating and rewarding work environment, competitive salaries and excellent company paid benefits. Please send your resume and salary history to: **Human Resources Department, Hybritech Incorporated, P.O. Box 269006, San Diego, CA 92126.**



An Equal Opportunity Employer

TOXICOLOGIST

**ENVIRONMENTAL AFFAIRS &
SAFETY DEPARTMENT**

This is an exceptional opportunity to join one of the world's most progressive major petroleum corporations. As a technically skilled scientist you will have key participation in our corporate-wide toxicology and product compliance program.

Based at our downtown headquarters location you will assume responsibilities that include interacting with the FDA and the USDA to obtain product approval, responding to new rules and amendments, and providing general assistance in meeting corporate toxicology needs. Providing general interpretation of toxicity data and participating in trade association activities are also responsibilities of this position. You must have a Ph.D. in toxicology, pharmacology or a related science. 3-7 years of industrial toxicology experience is highly desirable. Computer skills would be beneficial.

As an industry leader we provide highly competitive compensation, an attractive benefits package, and growth-directed professional challenge. For prompt consideration forward your confidential resume, with salary requirements, to:



Coordinator of Technical Recruiting
AMOCO CORPORATION
200 E. Randolph Drive
Mail Code 3801
Chicago, IL 60601

An Equal Opportunity Employer M/F/H/V

CONFERENCE

CONFERENCE The New York Academy of Sciences Conference on CYTOTOXIC T CELLS: BIOLOGY AND RELEVANCE TO DISEASE 13 to 15 May 1987 Marriott Hotel, Bethesda, MD

This conference will deal with induced cytotoxic T-lymphocytes, the newest effector cells in our immunological armamentarium. Six major topics will be addressed within a 3-day interval. Thereafter, it will focus upon genetics of CTL's, requirements for their generation, as well as down regulation and the mechanism by which they kill. Interwoven with these topics will be information relative to involvement of CTL's in transplantation, immunopathology, and regulation of tumor growth.

There will be a contributed poster session. Abstracts related to the above listed topics are welcome. The deadline for submission of abstracts is 15 February 1987. The abstracts should include the name of the author(s), institution, and a 200-word summary of the work to be presented. Send abstracts to: **Dr. Jack R. Battisto, Department of Immunology and Cancer, The Research Institute, Cleveland Clinic Foundation, Cleveland, OH 44106.** After review, a selected number of these short manuscripts, as well as those of the invited speakers, will be published as a volume of the *Annals of the New York Academy of Sciences*.

Conference cochairmen are: **Jack R. Battisto, Ph.D., Cleveland Clinic Foundation; Janet Plate, Ph.D., Rush-Presbyterian-St Luke's Medical Center; and Gene Shearer, Ph.D., National Cancer Institute.**

For program or registration information, contact:

Conference Department
The New York Academy of Sciences
2 East 63 Street
New York, NY 10021

SYMPOSIUM

ROLE OF BIOMARKERS IN REPRODUCTIVE AND DEVELOPMENTAL TOXICOLOGY

12 to 14 January 1987, the National Academy of Sciences (NAS), Environmental Protection Agency, and National Institute of Environmental Health Sciences will hold a symposium in the NAS Auditorium, 2101 Constitution Avenue, NW, Washington, DC. General concepts of biomarkers in reproductive and developmental toxicology will be discussed with emphasis on male and female reproductive and developmental toxicology, developmental neurotoxicology, and exposure during pregnancy. Attendance will be limited. Deadline for registration is 19 December 1986. For registration and poster information, contact: **NAS, Committee on Reproductive and Developmental Toxicology (JH 653), 2101 Constitution Avenue, NW, Washington, DC 20418; or call 202-334-2897.**

GRADUATE TRAINING

ASSISTANTSHIPS GRADUATE TRAINING PROGRAM IN NEUROSCIENCE

The Neuroscience Program at The Milton S. Hershey Medical Center of The Pennsylvania State University has assistantships available in September 1987. This interdepartmental program is designed to confer a Ph.D. degree with a major in neuroscience after 4 years of study. A master's degree program is also available. Participating faculty have established research programs in molecular biology of the nervous system, neurophysiology, neuroendocrinology, behavioral science, neuropharmacology, and cerebral blood flow and metabolism. Interested candidates are invited to apply to: **Dr. Robert Page, Chairman, Neuroscience Program, The Milton S. Hershey Medical Center, The Pennsylvania State University, P.O. Box 850, Hershey, PA 17033.** An Equal Opportunity/Affirmative Action Employer.

TRAINING PROGRAM

Graduate Studies in Biology—Wake Forest University. The Department of Biology, with a faculty of 18, offers the M.S. and Ph.D. degrees with concentrations in plant physiology, cell biology, immunoparasitology, animal physiology, neurobiology, developmental biology, parasitology, animal behavior, physiological ecology, population genetics, and population and community ecology. Assistantships are available for fall 1987. Contact: **Dr. Robert Browne, Graduate Chair, Department of Biology, Wake Forest University, Winston-Salem, NC 27109.** An Equal Opportunity Employer.

GRADUATE ASSISTANTSHIPS

GRADUATE ASSISTANTSHIPS

The Department of Environmental Sciences announces the availability of research assistantships in the Ph.D. graduate program. The assistantships are available beginning in September 1987 in the general area of biogeochemical cycling. The specific focus is in the areas of: processes controlling the composition of precipitation in North America, Atlantic Ocean, and remote regions of the Southern Hemisphere; interactions within forested watersheds that control the chemical cycling among the forest, soil, and stream components; and mathematical modeling of these processes and interactions.

Interested applicants are invited to write: **Dr. James N. Galloway, Coordinator, Graduate Admissions, Department of Environmental Sciences, Clark Hall, University of Virginia, Charlottesville, VA 22903.**

FELLOWSHIPS

STAFF FELLOWSHIP NATIONAL INSTITUTES OF HEALTH NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

Ph.D. or M.D. must have training in molecular biology to study genetic defects in human phagocytic cell function.

Submit curriculum vitae and three references to, or obtain information by contacting:

Harry L. Malech, M.D.
Head, Bacterial Diseases Section
Laboratory of Clinical Investigation
Building 10, Room 11N112
Bethesda, MD 20815
Telephone: 301-496-1343
An Equal Opportunity Employer

POSTDOCTORAL FELLOWSHIPS are available in light and electron optical and spectroscopic training in cardiovascular research. Candidates will receive training and participate in research conducted on cardiac, vascular smooth and skeletal muscle, and blood platelets with methods including electron probe x-ray microanalysis, x-ray mapping, electron energy loss spectroscopy, energy filtered imaging, scanning confocal and conventional light microscopy, image processing, and the use of fluorescent indicators. Members of training faculty are:

Dr. Stephen M. Baylor, Dr. Britton Chance, Dr. Gordon W. Ellis, Dr. Clara Franzini-Armstrong, Dr. John S. Leigh, Jr., Dr. Martin Morad, Dr. John M. Murray, Dr. Lee D. Peachey, Dr. Brian M. Salzberg, Dr. Joseph Sanger, Dr. Henry Shuman, Dr. Andrew P. Somlyo, Dr. Avril V. Somlyo.

Applications should be sent to:

A. P. Somlyo, M.D.
Director, Pennsylvania Muscle Institute
University of Pennsylvania
The School of Medicine
B42 Anatomy-Chemistry Building
Philadelphia, PA 19104-6083

Candidates with doctoral degrees in biological sciences or physics and having some previous experience with any of these methods are given preference, but applications will also be considered from individuals with a strong biological background and requiring training with imaging methods. U.S. citizens and permanent residents only are eligible for appointments at the NIH postdoctoral fellowship level. The beginning stipend ranges from \$25,996 to \$30,000, based on the years of relevant experience. Equal Opportunity Employer.

FELLOWSHIPS

POSTDOCTORAL AND PREDOCTORAL FELLOWSHIPS. Excellent opportunities are available for qualified postdoctoral and predoctoral applicants to enter our toxicology training program. Postdoctoral applicants must have a Ph.D. in any area of biological or biomedical sciences or an M.D. and an inclination for training in toxicology. Predoctoral applicants will require B.S. in toxicology, biology, chemistry, pharmacy, or related areas with a GPA of three or above and GRE. Areas of specialization include neurotoxicology, hepato- and pulmonary toxicology, immunotoxicology, genotoxicology, renal, and other organ system toxicology. Stipends provided by the National Institute of Environmental Health Sciences are available for qualified and meritorious applicants. Requires U.S. citizenship or permanent residence visa in the United States. Send inquiries to: **Dr. H. M. Mehendale, Professor and Director, Training Program in Toxicology, Department of Pharmacology and Toxicology, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505.** Equal Opportunity Employer, M/F/H/V.

POSTDOCTORAL FELLOWSHIP AVAILABLE, CELLULAR IMMUNOLOGY, January 1987, in the laboratory of **Dr. Malcolm S. Mitchell, Kenneth Norris Jr. Cancer Hospital and Research Institute, University of Southern California Cancer Center, Los Angeles, CA.** Opportunity available in human tumor immunology for an individual with background in cell-mediated immunity in animals or humans interested in mechanisms and targets of lymphocyte-mediated cytotoxicity. Would be involved in scientific investigations associated with NIH and privately funded studies of active specific immunotherapy and interleukin-2 treatment in melanoma. Please send inquiries, curriculum vitae, and names of two to three references to: **Malcolm S. Mitchell, M.D., University of Southern California Cancer Center, 2025 Zonal Avenue, Los Angeles, CA 90033.**

DALLAS—The University of Texas Health Science Center at Dallas (UTHSCD), Southwestern Medical School, is seeking PGY-5 level psychiatrist for a 1-year **FELLOWSHIP IN FORENSIC PSYCHIATRY** from 1 July 1987 to 30 June 1988. The position pays \$33,000 per year. Experiences in competency to stand trial, criminal sentencing considerations, civil law, commitment law, treatment in forensic settings, and profiling are all part of the curriculum. There will also be an opportunity to teach residents and others about forensic issues. Fellow will attend classes at Southern Methodist University School of Law and participate in guided study with preceptor supervision. Telephone or write: **J. Douglas Crowder, M.D. Program Director at UTHSCD, Department of Psychiatry, 5323 Harry Hines Boulevard, Dallas, TX 75235-9070; telephone: 214-688-3363.** We are an Equal Opportunity University.

SMITHSONIAN INSTITUTION FELLOWSHIP PROGRAM

GRADUATE STUDENT, PRE-, POST-, AND SENIOR POSTDOCTORAL FELLOWSHIPS in American history and material culture, anthropology, biological sciences, earth sciences, history of art, and history of science and technology. Tenable in residence at the Smithsonian and its research facilities. Stipends and tenures vary. Deadline: 15 January annually. Contact: **Office of Fellowships and Grants, Smithsonian Institution, Desk S, L'Enfant Plaza, Suite 7300, Washington, DC 20560; telephone: 202-287-3271.** Awards are based upon merit, without regard to race, color, religion, sex, national origin, age, or condition of handicap of applicant.

MARKETPLACE

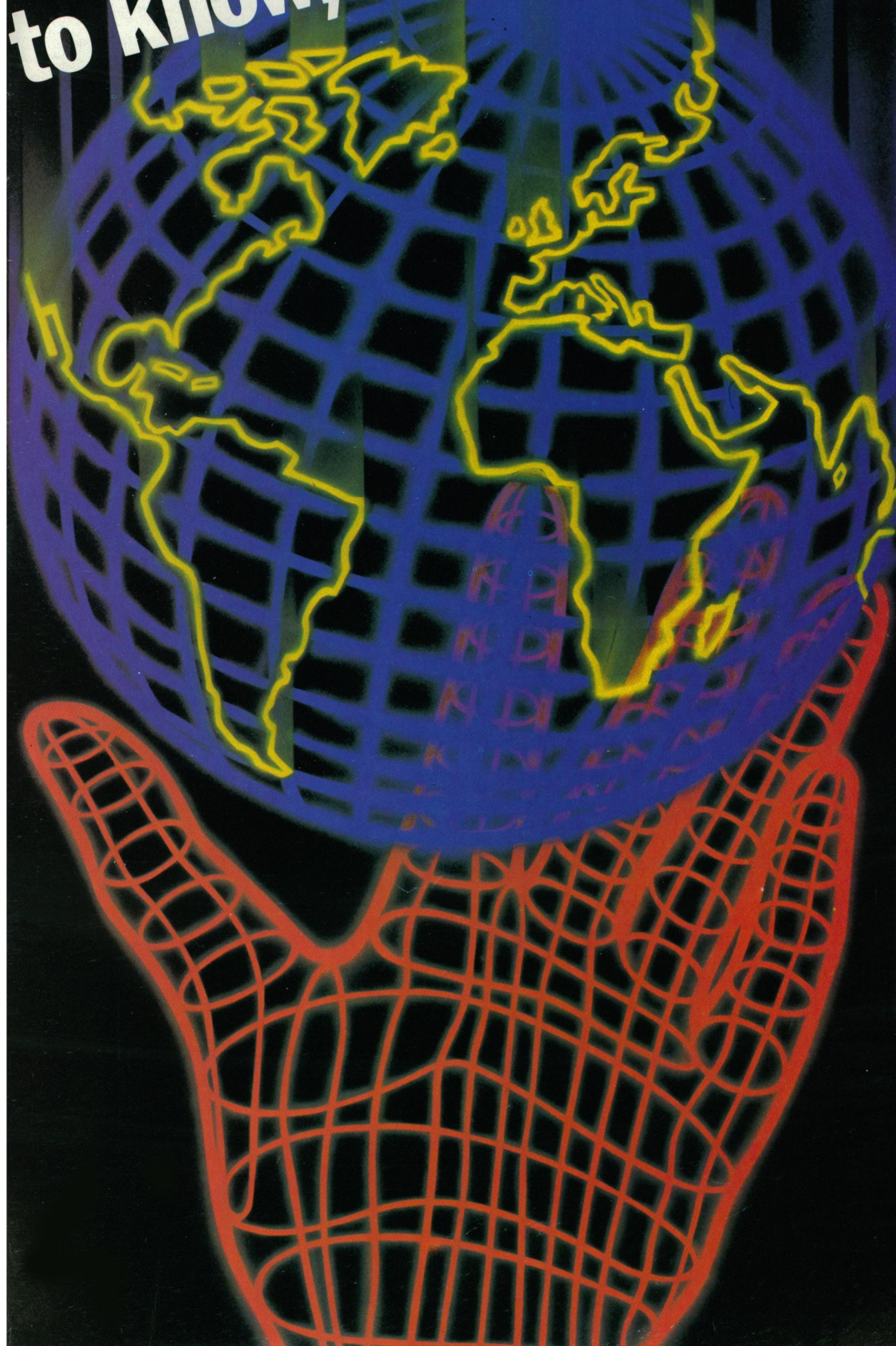
MACROSCOPE 25

Portable 25X microscope with wide 8mm field. High resolution optics. Camera adaptable. Ideal for entomology, textiles, general lab use, QC. About \$110.

Write:
RF Inter-Science, Box 505,
Huntington, NY 11743
(516) 421-1342

Circle No. 154 on Readers' Service Card

The care to meet to know, to understand.



Ares-Serono Symposia is an independent foundation, created in 1971, to promote scientific research in all disciplines which contribute towards improving human health. This aim is pursued by means of congresses, courses, seminars and specialized studies.

Some of the international meetings scheduled for 1987 are:

Herpes and Papilloma Viruses

Milan, Italy / March 26-27

Scientific Organization: F. De Palo (I), F. Rilke (I) and H. Zur Hausen (D)

IV Pan American Congress of Andrology

São Paulo, Brazil / May 4-6

Scientific Organization: A. Negro-Vilar (USA) and M. P. De Castro (BZ)

Inhibin - Non-Steroidal Regulation of Follicle Stimulating Hormone Secretion

Tokyo, Japan / May 21-22

Scientific Organization: H. Burger (Aus) and M. Igarashi (J)

Development and Function of the Reproductive Organs

Turku, Finland / June 10-12

Scientific Organization: M. Parvinen (SF)

IV Colloquium of the European Pineal Study Group

Modena, Italy / August 31 - September 4

Scientific Organization: G.P. Trentini (I), A. Oksche (D) and P. Pèvet (F)

Cell-to-Cell Communication in Endocrinology

Florence, Italy / October 8-9

Scientific Organization: L. Martini (I), M. Serio (I) and C.W. Bardin (USA)

Differentiation Therapy for Cancer

Tucker's Town, Bermuda / October 23-25

Scientific Organization: G.B. Rossi (I), F. Takaku (J) and S. Waxman (USA)



**ARES
SERONO
SYMPOSIA**

Do you know all the advantages that the Ares-Serono Symposia Congress Card offers? Please fill in this form and mail to Ares-Serono Symposia for information.



swissair  Official Carrier

I would like to receive information about:

- ☐ Ares-Serono Symposia Congress Card
- ☐ All the above Congresses
- ☐ In particular the Congress on

☐ Ares-Serono Symposia Publications

Name

Address

Institution

Please send to Ares-Serono Symposia,
Via Ravenna 8 - 00161 Rome - Italy

SC

THE RIGHT STUFF

for CRYO Sectioning



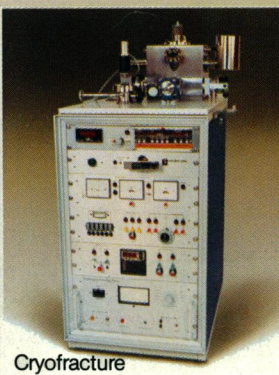
Macrocryomicrotomy



Cryoultramicrotomy



Cryomicrotomy



Cryofracture



Cryofixation

You select the system for you.

Reichert has all the right stuff for cryomicrotomy, ultra and macro cryomicrotomy, cryofixation and cryofracture technique.

We give you a single source for all your cryo-oriented sectioning instrumentation. A single source for service. A single source for technical

assistance from our applications laboratory.

For routine use through advanced research needs, Reichert gives you rapid, reliable instrumentation -- the right stuff for you.

Call 800-828-1200 (in NYS 800-462-1221) or write for a demonstration.

Reichert Jung

Cambridge Instruments Inc.
P.O. Box 123
Buffalo, New York 14240
Tel: (716) 891-3000

For literature circle reader service number 107
For a demonstration circle reader service number 108