ences among the islands in water temperature, salinity, and nutrient content. Consequently this is in many ways an ideal place for examining the relationship between environment and reef development.

This book provides an introduction to the coral reefs of the Galápagos. The core of the book is a series of descriptive accounts of the reef communities found at sites throughout 17 of the islands. Although the descriptions are based primarily on limited surveys conducted by the authors during two short field excursions, they successfully convey the general composition and diversity of Galápagos reef communities and larger patterns in the distribution of reefs throughout the islands. Remaining chapters of the book describe the various factors that potentially influence the observed distributions of corals and coral reefs, including the physical environment, rates of coral growth, ecological interactions, and the historical biogeography of the region. These chapters consist primarily either of the authors' own research or of reviews of the existing literature and thus vary widely in breadth and content. Woven throughout the book, and explicit in the final chapter, is comparison of the Galápagos reefs with others in the eastern Pacific. For example, it is noted that the major predator of corals in the Galápagos, the urchin Eucidaris thouarsii, does not feed heavily on corals elsewhere. This striking shift in the ecological role of a species over its range underlines the importance of geographical comparisons.

Appended to the book is an annotated species list of the scleractinian corals compiled by John Wells. It is accompanied by black-and-white plates of all species, but does not include species descriptions. As the most recent systematic treatment of the Galápagos coral fauna, this appendix is a significant and useful contribution.

This book will be a valuable resource for anyone interested in the shallow marine communities of the Galápagos Islands because it covers a wide range of topics and is filled with information. However, the text rarely attempts to draw this information together or to relate it to issues of more general interest. Similarly, the book as a whole would have benefited greatly from a concluding chapter that synthesized and connected the various topics presented.

Perhaps it is appropriate, though, for this first description of the Galápagos reefs to lack conclusiveness. By gathering together a wealth of basic informa-



'Close-up view of pocilloporid mounds illustrating their compactness and rigidity, lava rock basin, Espinosa Point, 16 January 1975.' [From Corals and Coral Reefs of the Galápagos Islands]

tion, the authors have provided an important basis for framing future studies of the region.

**ELIZABETH A. CHORNESKY** Department of Invertebrate Zoology, National Museum of Natural History, Washington, D.C. 20560

### **Books Received**

The Biological Fractionation of Isotopes. Eric M. Galimov. W. G. Meinschein, Transl. Ed. Academic Press, Orlando, Fla., 1985. xx, 261 pp., illus. \$49.50. Translated from the Russian edition (Moscow, 1981) by Dorothy B. Vitaliano. Biological Membranes. Vol. 5. Dennis Chapman,

Ed. Academic Press, Orlando, Fla., 1984. xiv, 494 pp., illus. \$75.

Boundary Element Techniques in Computer-Aided Engineering, C. A. Brebbia, Ed. Nijhoff, Dordrecht, 1985 (U.S. distributor, Kluwer, Hingham, Mass.). xii, 440 pp., illus, \$58.50. NATO ASI Series E, No. 84. From an institute, Southampton, England, Sept.

1983.
Bridging Worlds through General Semantics. Selections from the First 40 Years of *Et cetera*, 1943–1983. Mary Morain, Ed. International Society for General Semantics, San Francisco, 1985. xviii, 347 pp. \$12; paper, \$7.50.
Calcium in Biological Systems. Ronald P. Rubin, George B. Weiss, and James W. Putney, Jr., Eds. Plenum, New York, 1985. xxvi, 737 pp., illus. \$89,50. From a meeting. Chicago. April 1983.

Decouge D. weiss, and Janles w. Putney, Jr., Eds. Plenum, New York, 1985. xxvi, 737 pp., illus. \$89.50. From a meeting, Chicago, April 1983. Carlson Wade's Amino Acids Book. Keats, New Canaan, Conn., 1985. xii, 145 pp. Paper, \$2.95. Carlson Wade's PMS Book. Keats, New Canaan, Conn., 1984. vi, 131 pp. Paper, \$2.95. Cellular and Molecular Biology of Plant Stress. Joe L. Key and Tsune Kosuge, Eds. Liss, New York, 1985. xviii, 494 pp., illus. \$66. UCLA Symposia on Molecular and Cellular Biology, New Series, vol. 22. From a symposium, Keystone, Colo., April 22. From a symposium, Keystone, Colo., April 1984

Charge Density Waves in Solids. Gy. Hutiray and J. Sólyom, Eds. Springer-Verlag, New York, 1985. xiv, 541 pp., illus. Paper, \$36.50. Lecture Notes in Physics, vol. 217. From a conference, Budapest, Sept. 1984. Enzyme Nomenclature 1984. Recommendations of

the Nomenclature Committee of the International Union of Biochemistry on the Nomenclature and Classification of Enzyme-Catalyzed Reactions. Academic Press, Orlando, Fla., 1984. xx, 647 pp. Paper, \$19.50. Revision of 1978 edition.

The Enzymes of Biological Membranes. Vol. 2, Biosynthesis and Metabolism. Anthony N. Marton-osi, Ed. 2nd ed. Plenum, New York, 1985. xxii, 449

osi, Ed. 2nd ed. rienum, new York, 1998. And pp., illus. \$59.50. The Enzymes of Biological Membranes. Vol. 3, Membrane Transport. Anthony N. Martonosi, Ed. 2nd ed. Plenum, New York, 1985. xxiv, 676 pp., illus. \$89.50.

The Enzymology of Carbonyl Metabolism 2. Alde The Enzymology of Carbonyl Metabolism 2. Alde-hyde Dehydrogenase, Aldo-Keto Reductase, and Alcohol Dehydrogenase. T. Geoffrey Flynn and Henry Weiner, Eds. Liss, New York, 1985. xii, 317 pp., illus. \$46. Progress in Clinical and Biological Research, vol. 174. From a workshop, Kingston, Ontario, Canada, July 1984. Field and Theory. Lectures in Geocryology. Mi-chael Church and Olav Slaymaker, Eds. University of British Columbia Press Vancouver 1985. xvi

of British Columbia Press, Vancouver, 1985. xvi,

of British Columbia Press, Vancouver, 1985. xvi, 213 pp., illus. \$25.95. Fine-Grained Sediments. Deep-Water Processes and Facies. D. A. V. Stow and D. J. W. Piper, Eds. Published for the Geological Society by Blackwell Scientific, Palo Alto, Calif., 1984. viii, 659 pp., illus. \$99. From a workshop, Halifax, Canada, Aug. 1982. Regulation and Development of Membrane Trans-port Processes. James S. Graves, Ed. Published for the Society of Gameral Phyciologist by Wiley. New

the Society of General Physiologists by Wiley, New York, 1985. xvi, 287 pp., illus, \$39.95. Society of General Physiologists Series, vol. 39. From a sym-posium, Woods Hole, Mass., Sept. 1983.

Regulation of the Immune System. Harvey Cantor, Leonard Chess, and Eli Sercarz, Eds. Liss, New York, 1984. xxxii, 976 pp., illus. \$160. UCLA Sym-posia on Molecular and Cellular Biology, New Se-ries, vol. 18. From a symposium, Park City, Utah, March 1984.

Relations between Normal Aging and Disease. Hor-ton A. Johnson, Ed. Raven, New York, 1985. xiv, 256 pp., illus. \$39,50. Aging Series, vol. 28. From a symposium, Sept. 1982. Relativity and Consciousness. A New Approach to Evolution. Kate Flores. Gordian Press, New York, 1985 x - 172 am Paron \$10

Evolution. Kale Piores. Jointain Press, New Fork, 1985. x, 173 pp. Paper, \$10. Reliability of Engineering Materials. Alrick L. Smith, Ed. Butterworths, Boston, 1984. 151 pp., illus. Paper, \$35.95.

Renormalization. An Introduction to Renormalization, the Renormalization Group, and the Operator-Product Expansion. John C. Collins. Cambridge University Press, New York, 1984. x, 380 pp., illus. \$49.50. Cambridge Monographs on Mathematical **Physics** 

Repairable Lesions in Microorganisms. A. Hurst and A. Nasim, Eds. Academic Press, Orlando, Fla., 1984. xiv, 325 pp., illus. \$55. Representations of General Linear Groups. G. D.

Representations of General Linear Groups. G. D. James. Cambridge University Press, New York, 1884. xii, 147 pp., illus. Paper, \$19.95. London Mathematical Society Lecture Note Series, 94. Research and Development in Information Retriev-al. C. J. van Rijsbergen, Ed. Published on behalf of the British Computer Society by Cambridge Uni-versity Press, New York, 1984. x, 433 pp., illus. \$49.50. The British Computer Society Workshop Series. From a symposium, Cambridge, England, July 1984. July 1984.

Research and Its Management. A Perspective and Critique. Richard Trumbull. Vantage, New York,

Critique, Richard Trumbull, Vantage, New York, 1984. xii, 169 pp. \$12.95. Spin Labeling in Pharmacology. Jordan L. Holtz-man, Ed. Academic Press, Orlando, Fla., 1984. xiv, 229 pp., illus. \$49.50. Spot Test Analysis. Clinical, Environmental, Fo-rensic, and Geochemical Applications. Ervin Jun-greis. Wiley-Interscience, New York, 1985. xiv, 315 pp., illus. \$60. Chemical Analysis, vol. 75. Subclinical Henstevalluler Carciname Tang Zhao.

Subclinical Hepatocellular Carcinoma. Tang Zhao-you, Ed. China Academic Publishers, Beijing, and Springer-Verlag, New York, 1985. xxxii, 366 pp., illus. \$83.

illus. \$83. Supermanifolds. Bryce DeWitt. Cambridge University Press, New York, 1984. xiv, 316 pp. \$59.50. Cambridge Monographs on Mathematical Physics. Syntax and Semantics. Vol. 17, Composite Predi-cates in English. Ray Cattell. Academic Press, Or-lando, Fla., 1984. xii, 311 pp. \$42. Understanding Automation Systems. Neil M. Schmitt and Robert F. Farwell, with contributions by Gerald Luecke, Charles W. Battle, and Leslie E. Mansir. Texas Instruments, Dallas, 1984. iv, 276 po., illus, Paper. \$14.95.

Mansir. Texas Instruments, Dallas, 1984. iv, 276 pp., illus. Paper, \$14.95.
Understanding Microprocessors. Don L. Cannon and Gerald Luecke. 2nd ed. Texas Instruments, Dallas, 1984. iv, 284 pp., illus. Paper, \$14.95.
'X' Stands for Unknown. Isaac Asimov. Avon, New York, 1985. 218 pp. Paper, \$3.95. Reprinted from *The Magazine of Fantasy and Science Fiction.*Young Children Learning. Barbara Tizard and Martin Hughes. Harvard University Press, Cambridge, Mass., 1984. 286 pp. \$15.



### Liposome Apparatus

The Liposomat is designed for rapid preparation of from 5 to 10 ml of lipsomes by controlled, reproducible detergent removal from equilibrated solutions of mixed lipid/detergent micelles at defined temperature under standardized conditions. A plate dialyzer guarantees controlled dialysis kinetics. Liposomes are formed within a few minutes and the first liposomes are obtained after 10 minutes. Within 60 minutes the preparation will contain liposomes with a 2 to 3 percent residual detergent concentration. After 90 minutes, this is reduced to 1 percent or less. Prepared liposomes are unilamellar or oligolamellar and uniformly sized. Dianorm. Circle 627.

### **Cell Sorter**

The ACAS 470 is an anchored cell sorter and fluorescence workstation. It functions as a "no-flow" cytometer that enables one to analyze cell monolayers maintained in a tissue culture environment. Automated clonal selection and fluorescence techniques are utilized through a combination of laser technology, epi-illumination microscopy, and rapid, high-resolution stage positioning under computer control. Interactive software is applied to acquisition and analysis of data obtained by rapid modulation of the intensity of a focused laser beam. Fluorescent emissions are detected by a sensitive photomultiplier and digitized for storage and computation. Meridian Instruments. Circle 641.

### Assay for Carcinoembryonic Antigen

A double monoclonal antibody enzyme immunoassay is available for carcinoembryonic antigen. Simultaneous incubation in this tumor marker assay minimizes the sample treatment required. The assay uses a single washing step and needs no transfer of beads. Up to 50 samples may be assayed in less than 2 hours. Hoffmann-La Roche. Circle 636.

### **Clinical Chemical Analyzer**

The Advantage offers simultaneous performance of up to seven quantitative immunochemistry tests with no operator intervention. There are 40 programmable test modes, 25 of which are programmed for Gilford clinical chemistry tests and three (gentamicin, theophylline, and phenytoin) are programmed for Syva Emit assays. Validated protocols are available for procainamide and for valproic acid. A 14-position reagent transport will accommodate reagent A for immunoassay in seven outer positions and reagent B in seven inner positions. Automatic loading and unloading of up to 340 reaction cups allows the user up to 2 hours to perform other tasks while the Advantage operates. Gilford Instrument Laboratories. Circle 639.

### **Density Gradient Formers**

New gradient formers will produce linear and exponential gradients; they are designed for centrifugation and casting acrylamide gels for electrophoresis, chromatography, and other applications. They are fast and form continuous gradients in 15 minutes. The acrylic chamber system replaces the "step gradient technique" for filling centrifugation tubes. These inexpensive gradient formers are available in five sizes. Tekmar. Circle 638.

### Laboratory Data System

The OLIS 3920Z is a data acquisition and instrument control system specifically designed for use with spectrophotometers, stopped-flow and other kinetic spectrophotometric and apparatus. Hardware includes a Z-100 microprocessor (768 kilobytes RAM), graphics subsystem, input-output subsystem, analog-digital converting subsystem, a high-resolution monitor, and a graphics printer. Software features include data collection at user-selected rates up to 1 MHz or 300 spectra per second, highresolution graphic display, data manipulation, storage and retrieval, and instrument control elements. Algorithms for manipulation include average, add/subtract, multiply, smooth, integrate, invert, exponential fit, and others. On Line Instrument Systems. Circle 642.

### **Automated Carbon Analyzer**

The DC-90 total organic carbon analyzer uses a high-temperature catalytic combustion infrared technique. Detection limit is increased to 100 parts per billion. The system features a vertical ceramic combustion tube and three single-point calibration ranges spanning 0.1 to 4000 parts per million. Use of the hightemperature reactor enables one to analyze water that is cloudy or that contains particles (up to 0.4 mm). The reactor section of the DC-90 is interchangeable with the low-temperature, ultravioletpersulfate reactor in the DC-80 model. Dohrmann Division, Xertex. Circle 637.

#### Literature

HPLC Solvent Reference Manual provides the chromatographer with a comprehensive source of mobile phases. J. T. Baker Chemical. Circle 645.

*Essentials of Gas Chromatography* includes troubleshooting tools, samplers, ferrules, traps, columns, and more. Chemical Research Supplies Division, L.C. Circle 647.

*Product Catalog* is a comprehensive offering of electronic analytical balances, scales, weighing-related peripherals, and analytical instruments, including titrators and thermal analyzers. Mettler Instrument. Circle 648.

Specialty Gases features pure and carrier gases, mixtures, containers, regulators, and other gas-handling apparatus for the scientific laboratory. Scott Specialty Gases. Circle 649.

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 (on pages 1482A and 1558E) and placing it in a mailbox. Postage is free. —RICHARD G. SOMMER



## NOVO RESEARCH SEMINAR

### "The Biogenesis of Regulatory Peptides"

22nd-23rd AUGUST 1985 Novo Industri A/S, Bagsvaerd, Copenhagen, Denmark

> Organising committee: J.F. Rehfeld, T.W. Schwartz, L. Olsson, U.V. Lassen.

> > There will be five sessions:

I. Post-Transcriptional Processing: chairman Niels Fiil, Novo's Genetic Laboratory Lecturers: S. Nakanishi, Kyoto University J.F. Habener, Massachusetts General Hospital, Boston D. Richter, Hamburg University

II. Intra-Cellular Targeting of Precursors: chairman Ove Noren, University of Copenhagen Lecturers: D.I. Meyer, EMBL, Heidelberg R.B. Kelly, University of California, S.F.

III. Proteolytic Processing: chairman Howard S. Tager, The University of Chicago Lecturers: J. Thorner, University of California, Berkeley T.W. Schwartz, MRC, University Hospital, Copenhagen K. Docherty, University of Birmingham G. Kreil, Austrian Academy of Science, Salzburg

IV. Amino Acid Derivatization: chairman G. Kreil, ibid. Lecturers: D.G. Smyth, MRC, London B.A. Eipper, The Johns Hopkins University, Baltimore C.C. Glembotski, University of Pennsylvania G.S. Baldwin, Royal Melbourne Hospital W.B. Huttner, Max-Planck Institute, München

V. Specific Peptide Systems: chairman Jens Vuust, Arhus University Lecturers: H.S. Tager, the University of Chicago T. Yamada, the University of Michigan J.F. Rehfeld, University Hospital, Copenhagen

Participation in the seminar itself is free. Travel and accommodation expenses will have to be met by participants. Closing date for registration is 1st August 1985. For details and registration, please contact: Mrs. Karen Rimmer, Novo Industri A/S, Novo Alle, DK-2880 Bagsvaerd, Denmark Tel: (02) 982333, extension 3531.



# 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 under-standing that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap, or sexual prefe-ence.

LINE CLASSIFIED ADVERTISING DEADLINES: 19 July issue (mailed 12 July): **28 June** 26 July issue (mailed 19 July): **5 July** 2 August issue (mailed 26 July): **12 July** 9 August issue (mailed 2 August): **19 July** 

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

LINE DISPLAY (POSITIONS OPEN, COURSES, FEL-LOWSHIPS, MARKETPLACE, and so forth): \$11.40 per millimeter; \$285 minimum, per week (minimum charge covers 25 millimeters on a single column; 25 millime-ters 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 or-ders and billing address required for all other advertis-ing.

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

SCIENCE, Room 107 1515 Massachusetts Avenue, NW Washington, D.C. 20005 Telephone: 202-467-4456

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

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

Blind ad replies should be addressed as follows:

Box (give number) SCIENCE 1515 Massachusetts Avenue, NW Washington, D.C. 20005

### POSITIONS WANTED

M.S.-M.D. Biomedical Engineer/Physiologist. Two M.S.-M.D. Biomedical Engineer/Physiologist. Two years of direct experience in high-speed digital, analog, and human computer interfaces from devel-opment through prototype. Additional experience in membrane research, including flow cytometry. Seeking application engineering position in academ-ics or industry. Box 140, SCIENCE. 6/28; 7/5, 12, 19

Cardiovascular Pharmacologist Ph.D., 1984. Experi-Cardiovascular Pharmacologist Ph.D., 1984. Experi-ence with isolated arteries, chronic cannulation preparations, radiotracers and liquid scintillation counting, plus more. Publications, awards for pre-sentations, and successful grant applications. An innovative problem-solver, works well with others. Desires industrial position. No geographical restric-tions. Telephone: 904-392-3340. Box 139, SCI-ENCE. 6/28, 7/5

Immunologist/Biotechnologist. Ten Ph.D.-M.D. years of industrial research management and hands on experience in vitro diagnostic products develop-ment, including start-up, R&D, field testing, and technical support marketing. Areas of interest: im-munology, microbiology, clinical chemistry. Seek-ing challenging position in industry. Telephone: 201-391-2526. 6/28, 7/5

M.D. (Pathology Resident), Ph.D. in Biophysics, seeks job in clinical genetic toxicology offering a chance to monitor human mutagen exposure. Pre-fers concurrent duties in anatomic and/or clinical pathology. Extensive experience in mutagenesis as-says. Wisconsin and California medical licenses. Able to start July 1986. References and curriculum vitae available. Dr. Busch, UWHC Department of Pathology, 600 Highland Avenue, Madison, Wis. 53792. 6/28, 7/5

### POSITIONS WANTED

Plant Physiologist-Ph.D. 1981. Pesticides. Broad Prant Physiologist—Ph.D. 1981. Pesticides. Bload research experience, including field tests and en-zyme studies. Pesticide regulation experience deal-ing with EPA and FIFRA guidelines. Good organiza-tion and communication skills. Seeks position in Baltimore-Washington area. Box 141, SCIENCE. X

### POSITIONS OPEN

ACADEMIC PATHOLOGIST-We are seeking a e, established experimental pathologist a senior level to participate in an active academic pathology department. The applicant should be able to bring extramural research funds and should be on the forefront of some aspect of experimental pathol-ogy. The applicant should have an M.D. degree, be ogy. The applicant should have an M.D. degree, be experienced in teaching and in some service function within a general academic pathology department, and be Board-certified in pathology. Salary is com-mensurate with experience. Mail curriculum vitae to: Francis E. Cuppage, M.D., Department of Pathol-ogy and Oncology, University of Kansas Medical Center, Kansas City, Kansas 66103. An Equal Oppor-tunity/Affirmative Action Employer.

ASSISTANT OR ASSOCIATE PROFESSOR. The Assistant of Associate Horizon. Inc Division of Cancer Biology of the Joint Center for Radiation Therapy at Harvard Medical School is seeking applicants for two tenure-track faculty posi-tions. Positions require a Ph.D. and relevant posttions. Positions require a Ph.D. and relevant post-doctoral experience. The objectives of the cancer biology program are to develop and test strategies for biochemical modulation of tumor or normal tissue sensitivity to x-rays and chemotherapeutic drugs. The program will be multidisciplinary, closely associated with the clinic, and highly interactive with other basic science departments. Applicants should possess a research interest in biochemical modulation and will be expected to participate in collaborative projects within the division in addition to establishing independent investigations. Favored to establishing independent investigations. Favored areas of interest include redox or free radical chemareas of interest include redox of the radical chem-istry, thiol biochemistry, mechanisms of cell killing, metabolic regulation, and mechanisms of DNA re-pair. Participation in teaching activities of the de-partment expected. Experience with tumor and nor-mal tissue model systems and/or relevant biochemi-cal mechanisms desirable. Salary and rank commen-surate with qualifications. Send short description of research interests, curriculum vitae, and three let-ters of recommendation to: **Dr. Edward Bump, Re**search Coordinator, Division of Cancer Biology, Joint Center for Radiation Therapy, Harvard Medical School, 50 Binney Street, Boston, Mass. 02115. An Equal Opportunity/Affirmative Action Employer.

**PATHOLOGIST** in academic pathology department to provide service functions in surgical pathology and cytology. Candidate will be expected to teach pathology to house staff and medical students and to develop a research program. Rank and salary nego-tiable. Should be certified in anatomic pathology. Mail curriculum vitae to: Francis E. Cuppage, M.D., Department of Pathology and Oncology, University of Kansas Medical Center, Kansas City, Kansas 66103. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS to study biochemical modulation of sensitivity of tumor and normal tissue to x-rays or chemotherapeutic drugs. Background in biochemistry or tumor biology preferred. Areas of research interest that are favored include redox or free radical chemistry, thiol biochemistry, mechanisms of cell killing, metabolic regulation, and mechanisms of DNA repair. Postdoctoral experi-ence desirable, but not necessary. Salary commen-surate with qualifications. Please send a short description of research interests along with curriculum scription of research interests along with curricultum vitae and three letters of recommendation to: Dr. Edward Bump, Research Coordinator, Division of Cancer Biology, Joint Center for Radiation Therapy, Harvard Medical School, 50 Binney Street, Boston, Mass. 02115. An Equal Opportunity/Affirmative Ac-tion Employer tion Employer.

POSTDOCTORAL POSITION. Molecular biologist POSTDOCTORAL POSITION. Molecular biologist or biochemist to study cell ploidy and molecular mechanisms of growth control and mutagenesis in vascular cells. Experience working with vascular tissue preferred. Send curriculum vitae and three letters of recommendation to: Dr. Eliot Rosen, Joint Center for Radiation Therapy, Harvard Medical School, 50 Binney Street, Boston, Mass. 02115. An Equal Opportunity/Affirmative Action Employer.

### POSITIONS OPEN

Yale University. The Department of Chemistry in-vites applications for two tenure-track ASSISTANT **PROFESSOR** positions, effective academic year 1986. We seek outstanding individuals in any field of chemistry. Applications from those whose research interests overlap with the areas of organic or inor-ganic chemistry and the biological sciences are par-ioulocity undergone Applications should seem curriculicularly welcome. Applicants should send curricu-lum vitae, a statement of research plans, and should lum vitae, a statement of research plans, and should arrange for the submission of three letters of recom-mendation. All materials should be received by 1 December 1985. Send application to: **Professor S. L.** Schreiber, Chairman, Search Committee, Depart-ment of Chemistry, Yale University, P.O. Box 6666, New Haven, Conn. 06511. Yale University is an Equal Opportunity/Affirmative Action Employer.

Applications are invited for a position in NEURO-PHYSIOLOGY at the ASSISTANT PROFESSOR level in the Department of Physiology at the Univer-sity of Manitoba Faculty of Medicine. Candidates should have a Ph.D. or equivalent, with two or more years of postdoctoral training. Preference will be even to individuals with experience and a continugiven to individuals with experience and a continu-ing interest in electrophysiological analysis of neural networks and/or neurotransmitter actions using in vitro or in vivo systems. Send curriculum vitae, an vitro or in vivo systems. Send curriculum vitae, an outline of future research plans, and arrange for three letters of reference to be forwarded to: Dr. Henry G. Friesen, Professor and Head, Department of Physiology, The University of Manitoba, 770 Ban-natyne Avenue, Winnipeg, Manitoba, Canada R3E OW3. Deadline for receipt of applications is 1 Sep-tember 1985. In accordance with Canadian immi-gration requirements, this advertisement is directed to Canadian citizens and permanent residents.

### ASSISTANT RESEARCH PROFESSOR

The Department of Biochemistry of the George The Department of Biochemistry of the George Washington University Medical Center is seeking a Ph.D. in pharmaceutical chemistry. Applicant must have expertise in purification and sequencing of peptides and protein confirmation, plus at least 4 years of postdoctoral experience with 2 years of experience in industry. Send résumé to: Dr. Allan L. Goldstein, Biochemistry, 2300 I Street, NW, Wash-ington, D.C. 20037. The George Washington Univer-sity is an Equal Opportunity/Affirmative Action Em-ployer plover.

### THE UNIVERSITY OF CALGARY THE ALBERTA HEART FOUNDATION CHAIR OF CARDIOVASCULAR RESEARCH

The University of Calgary invites applications from established clinical or basic science investiga-tors for a newly endowed position in cardiovascular research. The person selected will be expected to provide leadership and promote collaborative re-search in the field of cardiovascular research, develop an independent research program in this field, op an independent research program in this heid, and promote educational and treatment programs for cardiovascular-related illnesses. Applicants must have the administrative ability and interest to recruit additional faculty and to assist in their academic discublement. All qualified individuals are encouraged to apply,

but preference will be given to Canadian citizens and permanent residents.

ana permanent restaents. Applicants are requested to submit curriculum vitae, a brief statement of interest, and the names of three references by 1 September 1985. Reply in confidence to:

Dr. M. A. Ward Dr. M. A. Ward Vice-President (Research) The University of Calgary 2500 University Drive, NW Calgary, Alberta, Canada T2N 1N4

University of Michigan, School of Public Health, is seeking a CHAIR for its Department of Environmen-tal and Industrial Health (EIH). Candidates should have an M.D., Ph.D., or other appropriate doctorate and a distinguished record as a researcher, teacher, and academic administrator. The department has a multidisciplinary faculty with research and teaching programs in water, radiological health, toxicology, environmental chemistry, and occupational health. *Applications from minority and women candidates are especially invited*. For full consideration, nomi-nations and applications should be received by 1 November 1985. Applications and nominations should be sent to: Dr. John H. Romani, Chair, EIH Chair Search, Office of the Dean, School of Public Health, University of Michigan, Ann Arbor, Mich. 48109. The University of Michigan is a nondiscrim-inatory, Affirmative Action Employer.

#### ASSOCIATE DIRECTOR FOR ACRC DIRECTOR FOR RESEARCH

The University of Arkansas Health Sciences Cam-pus is seeking a director for research for newly organized Arkansas Cancer Research Center (ACRC). Can be M.D. or Ph.D. Must have extensive research and teaching experience. Individual must qualify for full-time academic appointment at assoquality for full-time academic appointment at asso-ciate or professor level. Send curriculum vitae with inquiries to: Dr. D. H. Berry, Chairman, Search Committee, Professor of Pediatrics, Arkansas Chil-dren's Hospital, Hematology/Oncology, 804 Wolfe Street, Little Rock, Arkansas 72201. This is an Affir-mative Action/Equal Opportunity Employer. The deadline for applications is 1 August 1985.

### CHAIRMAN DEPARTMENT OF MICROBIOLOGY

The State University of New York at Buffalo is The State University of New York at Buffalo is seeking an individual to chair a well-established Department of Microbiology, with 19 full-time and 9 part-time state-funded faculty positions. An exten-sive volunteer faculty plays an important role in all departmental activities. Present space is 24,000 square feet, to be expanded shortly to 30,000 square feet, exclusive of teaching areas. The Center for Immunology, an integral component of the depart-ment, has two state-funded positions and is soon to occupy 5,000 square feet. (These resources are in addition to the departmental inventory.) Departmen-tal resnonsibilities include: (i) teaching at undergradtal responsibilities include: (i) teaching at undergrad-uate, graduate, and professional levels, (ii) a very active, high-quality graduate program, and (iii) ex-tensive research in immunology and microbiology. Candidates must have: (i) a well-established re-search program in an area of microbiology, immu-nology, or related field, (ii) a demonstrated ability to generate sustained funding, (iii) interest and exper-tise in teaching, and (iv) talent to coordinate efforts of individuals and groups. Please send résumé and names of three references to: Dr. Leon E. Farhi, Department of Physiology, 124 Sherman Hall, State University of New York at Buffalo, Buffalo, N.Y. 14214, before 15 September 1985. The State University of New York is an Equal Opportunity/Affirmative Action Employer. tal responsibilities include: (i) teaching at undergrad-



to the teaching of botany at undergraduate level and to supervise honours and postgrad-uate work in plant ecology.

The salary range for the position is \$26,236 to \$34,467 per annum and commencing salary will be determined in accordance with qualifications and experience.

Further information and experience. Further information and application forms are available from: The Registrar, James Cook University, Townsville Queensland, Australia 4811, with whom applications close on 2 August 1985. In reply, please quote Reference Number JS85060.

### POSITIONS OPEN

### CARCINOGENESIS The University of Texas System Cancer Center (UTSCC) Science Park-Research Division

Applications are invited for an assistant professor level faculty position in a multidisciplinary research laboratory studying cellular and molecular mecha-nisms of carcinogenesis. Research programs at Sci-ence Park, located in Buescher State Park 40 miles east of Austin, include somatic cell genetics, DNA repair and mutagenesis, carcinogen metabolism and adduct formation, tumor promotion, mechanisms of lymphomagenesis, normal and tumor cell differenti-ation, biochemical genetics, and growth factors. Candidates should have an independent research program that would interface with one or more of the above areas as wall as a record of pear reviewed grants and research publications. Preference will be given to individuals who have an active program on the cellular and molecular mechanism(s) by which the cellular and molecular mechanism(s) by which dietary fat influences the induction of cancer in the mammary gland, large bowel, or pancreas. The Science Park provides competitive salary and bene-fits, a stimulating research environment, postdoctor-al and graduate students, and opportunities for inter-action with faculty at nearby institutions, including the University of Texas Health Science Center in Houston, University of Texas at Austin, and Texas A&M University. Interested applicants should send complete curriculum vitae, the names of three refer-ences, and a brief statement of research interests to: Dr. Thomas L. Slæa, Director, LISCC, Science Park-Research Division, P.O. Box 389, Smithville, Tex. 78957; Telephone: 512-237-2403. An Equal Op-portunity/Affirmative Action Employer.

DIRECTOR, CLINICAL PHARMACOLOGY. We Direct OK, CLINICAL PHARMACOLOGY, we invite applications for the position of director of the Division of Clinical Pharmacology in the Depart-ment of Medicine at Jefferson Medical College. The director is responsible for the organization and im-plementation of research, teaching, and clinical pro-grams at Jefferson Medical College of Thomas Jefferson University. Please respond with curriculum vitae to: Willis C. Maddrey, M.D., Chairman, De-partment of Medicine, Jefferson Medical College, 1025 Walnut Street, Philadelphia, Pa. 19107.

PIONEER HI-BRED INTERNATIONAL, a world leader in plant-breeding research, is looking for several key scientists for its Microbial Genetics Division (MGD).

MGD is dedicated to agricultural microbiology. We use biotechnology in the identification of natu-rally occurring microorganisms of benefit to plants and animals. Our new state of the art facilities to be opened this summer in Johnston, Iowa, are dedicated to this endeavor.

Johnston is a northwestern suburb of Des Moines just 35 minutes from Iowa State University and the national laboratories of APHIS and ARS of the U.S. Department of Agriculture. Our laboratories are in a campus setting with the Departments of Plant Breed-ing, Biotechnology and Data Systems. In all, it represents an ideal environment for integrated re-search, independent project development and academic stimulation.

Des Moines offers many of the cultural advantages of larger cities: easy living, year-round recreational opportunities, and a favorable cost-of-living index of 102 (San Francisco 145). Chicago, Minneapolis, Omaha, Kansas City, and St. Louis are within 50 minutes' flying time.

The following positions are available:

- IMMUNOCHEMIST with monoclonal antibody skills and a knowledge of surface interactions.
- ANALYTICAL BIOCHEMIST to study microbial-environmental interactions
- PLANT PATHOLOGIST to study plant-patho gen interactions
- FERMENTATIONS SPECIALIST to supervise scale-up procedure
- ANIMAL PATHOLOGIST to study disease mechanisms
- MOLECULAR BIOLOGIST to study gene-environmental interactions.

Interested candidates should send a résumé to: J. R. Lebeda, Executive Vice President Microbial Genetics Division Pioneer Hi-Bred International, Inc. P.O. Box 258 Johnston, Iowa 50131

### POSITIONS OPEN

CHAIRPERSON, Department of Pathology. Applications are invited for the position of professor and chairperson, Department of Pathology, Medical Col-lege of Pennsylvania. Candidate should have an M.D. or Ph.D. and a commitment to excellence in medical education and to the development of signifi-cant research programs. Administrative experience is desired. Applications, including curriculum vitae, should be sent to: Andre D. Lascari, M.D., Chairshould be sent to: Andre D. Lascari, M.D., Chair-man, Pathology Search Committee, Department of Pediatrics, Medical College of Pennsylvania, 3300 Henry Avenue, Philadelphia, Pa. 19129. Equal Op-portunity Employer, M/F.

#### **GEORGETOWN UNIVERSITY** DEPARTMENT OF PSYCHIATRY CHAIRMAN SEARCH

The Georgetown University School of Medicine and Hospital are conducting a search for qualified candi-dates for the position of professor and chairman of the Department of Psychiatry commencing 1 July 1986

Candidates should have the appropriate credentials and experience in teaching, research, administra-tion, and patient-care service and be eligible for licensure to practice medicine in the District of Columbia with appropriate certification.

The candidate should have some experience in the administration of an academic medical unit such as a division or clinic.

The candidate should have an awareness of the new developments in psychiatry and be prepared to lead the department in a dynamic way for the next two decades. Individuals with all backgrounds from the psychoanalytic to psychobiologic are invited to submit applications.

Applications and nominations, including a letter and brief résumé, should be sent to:

John Collins Harvey, M.D. Chairman, Search Committee Gorman, Lower Level Georgetown University Medical Center 3800 Reservoir Road, NW Washington, D.C. 20007

Affirmative Action/Equal Opportunity Employer

THE AUSTRALIAN NATIONAL UNIVERSITY invites applications from suitably qualified women and men for appointment to the position of POST-DOCTORAL FELLOW/RESEARCH FELLOW/ SENIOR RESEARCH FELLOW, AUTOMATED REASONING PROJECT, in the RESEARCH SCHOOL OF SOCIAL SCIENCES. The project will be concerned with investigating the uses of non-classical logics in automated reasoning and is intend-ed to substantially extend the research previously done in the Department of Philosophy, RSSS, into automated theorem proving for such logics. Special emphasis will be placed on investigating applications of this research, in particular to problems in number theory. As well as the usual research support, the project expects to have its own dedicated computer. Applications should be logicians or suitably qualified Applications should be logicians or suitably qualified computer scientists, mathematicians or philoso-phers. It is expected that the appointments will be taken up after 1 April 1986. Applicants must write to the Registrar for further particulars. Other enquiries should be directed to the deputy coordinator of the project, Dr. M. A. McRobbie (062) 49 2035. Closing date: 14 August 1985, Reference: SS 22.5.2 Salary date: 14 August 1985, Reference: SS 22.5.2 Salary will be in accordance with qualifications and experi-ence within the range: postdoctoral fellow, \$22,614 to \$25,905 per annum; research fellow, \$26,236 to \$34,467 per annum; senior research fellow, \$26,649 to \$43,715 per annum. Current exchange rate A\$1.=U.S.\$.69. Appointment, unless otherwise stated, will be: senior research fellow/research fel-low normally up to 3 years with the possibility of extension to maximum of 5 years; postdoctoral fellow, normally 2 years, with the possibility of travel, assistance with housing, superannuation. Maternity leave is available. The University re-serves the right not to make an appointment or to Prospective applications, to: Patricia M. White, Acting Registrar, G.P.O. Box 4, Canberra, ACT, 2601 Aus-tralia tralia.

The University is an Equal Opportunity Employer.



### Group Leader Process Development

A move to Collagen Corporation is more than a step forward in your career. It's a step into the future of biotechnology. If you're looking for a progressive, high-energy environment where creativity counts, join the innovators at Collagen Corporation.

As a working supervisor of our process development group, you will lead nine biochemists, chemical engineers and technicians in process research and process engineering of new collagenbased products. You will also work with Manufacturing to improve existing manufacturing processes for both hard and soft tissue products.

An MS degree and a minimum of 5 years' experience in process development or process engineering in the pharmaceutical, biotechnology or fermentation industries are desired.

Collagen Corporation offers excellent growth potential and attractive salaries and benefits. To apply, please send your resume to D. Webster, Human Resources, Collagen Corporation, 2500 Faber Place, Palo Alto, CA 94303. We are an equal opportunity employer.



### POSITIONS OPEN

#### ASSISTANT PROFESSORS OF PLANT PATHOLOGY UNIVERSITY OF CALIFORNIA, DAVIS

Two 11-month (1-month vacation), tenure-track positions are available 1 January 1986, each with 20 percent teaching and 80 percent research responsibility.

VEGETABLE CROP PATHOLOGIST: Develop an original, basic research program on biology and control of diseases of vegetable crops, including physiogenic diseases, and to participate in teaching introductory plant pathology and a graduate course in the appointee's area of expertise.

**FRUIT CROP PATHOLOGIST:** Develop an original, basic research program on the biology and control of viral, mycoplasma or fastidious prokaryotic pathogens of woody perennial crops and to participate in teaching introductory plant pathology and a graduate-level course in the appointee's area of expertise.

Both appointees will also participate in missionoriented research, university service, and graduate advising/training. Applicants should have a Ph.D. in plant pathology or related discipline with expertise appropriate to the position. Send: (i) curriculum vitae, (ii) official undergraduate and graduate transcripts, (iii) list of official published work and reprints, (iv) statement of teaching and research interests, and (v) names and addresses of three references to:

R. K. Webster, Chairman Department of Plant Pathology University of California Davis, Calif. 95616 Telephone: 916-752-0300 Application deadline: 30 August 1985.

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

### DIRECTOR, PRECIPITATION PHYSICS AND CHEMISTRY LABORATORY

The Desert Research Institute is seeking a senior scientist to head its Precipitation Physics and Chemistry Laboratory within the Atmospheric Sciences Center. Requires Ph.D. in physics, chemistry, or atmospheric sciences; leadership qualities; demonstrated success in securing research grants and contracts; and broad spectrum of experience related to atmospheric physics and precipitation processes; this can include mathematical modeling, climatological analysis, weather modification, remote sensing, or precipitation chemistry. Salary commensurate with experience. Send résumé and letter of application, postmarked by 31 July 1985, to: Personnel Department, Desert Research Institute, University of Nevada System, P.O. Box 60220, Reno Nev. 89506. An Affirmative Action/Equal Opportunity Employer.

#### UNIVERSITY OF FLORIDA FLORIDA STATE MUSEUM (FSM) DIRECTOR

Applications are invited for the directorship of one of the largest and most active university museums of natural history. The FSM emphasizes research and exhibits on the natural and cultural history of Florida and Latin America.

exhibits on the natural and cultural history of Florida and Latin America. The FSM faculty consists of 24 salaried curators who also hold titular appointments in related teaching departments. Physically the museum is a modern structure central to the campus with one floor for each of its three departments, Natural Sciences, Anthropology, and Interpretations. The museum serves dual functions as the Florida State Museum, with permanent and traveling exhibits and a statewide membership program, and as a university museum, with strong research and educational missions.

The directorship is equivalent to the rank of dean within the University of Florida. Applicants should have appropriate experience and vision to plan the museum's long-range growth; to develop a statewide constituency and fund-raising campaign; to supervise the research and public education programs of the museum; and to maintain liaison with officers and lawmakers in state government.

and lawmakers in state government. The position opens as of January 1986. The salary is commensurate with qualifications and experience and competitive with that of other major museums. Applications naming three references should be postmarked no later than 31 October 1985 to: Dr. David Web, Florida State Museum, Gainesville, Fla. 32611. The search will be conducted under Florida's "Government in the Sunshine" Law. The University of Florida is an Equal Opportunity/Affirmative Action Employer.

### POSITIONS OPEN

DIRECTOR BLOOMFIELD CENTRE FOR RESEARCH IN AGING AT

### THE LADY DAVIS INSTITUTE FOR MEDICAL RESEARCH IN ASSOCIATION WITH MCGILL UNIVERSITY

The Lady Davis Institute will establish a new research group for studies in aging. Initially the group will consist of the leader and two junior investigators, with the focus of interest on various aspects of the biology of the aging process. It is anticipated that three more positions will become available for work in the psychosocial and epidemiological aspects of aging.

The successful candidate (M.D. or Ph.D.) must have a demonstrated research record in aging or a closely allied area. A tenure-track university appointment will be made at the level of associate professor or professor. Please submit current curriculum vitae, a short description of personal research interests, a brief comment on the desired areas of expertise of the two junior investigators to be recruited, and the names of three referees by 1 August 1985 to: Dr. Norman Kalant, Director, Lady Davis Institute for Medical Research, 3755 Cote St. Catherine Road, Montreal, Quebec, Canada H3T 1E2.

In accordance with Canadian immigration regulations, applications from Canadian citizens and landed immigrants will be considered first.

#### DIRECTOR INSTITUTE OF GOVERNMENT AND PUBLIC AFFAIRS (IGPA)

The University of Illinois invites nominations and applications for the position of director of the Institute of Government and Public Affairs.

The Institute is an all-university unit committed to research and service in the area of government affairs. Primary emphasis is placed on research into public policy issues at the federal, state, and local levels of government. The director is expected to provide leadership in broadening the Institute's research base, particularly in multidisciplinary areas such as governmental challenges in a technological society, health care, or economic development. The director reports to the Vice President for Academic Affairs of the two campus University of Illinois System. The Institute serves both campuses, but is housed on the Urbana-Champaign campus, and the new director will reside on that campus. The preferred candidate should have an earned doctorate, a cecord of teaching and scholarship appropriate to a tenured appointment in a university department, and a commitment to interdisciplinary applications to the study of government and public affairs. Salary and rank are open depending upon experience and qualifications. The preferred starting date will be January 1986 but a later date is possible. In order to receive full consideration, applications/nominations should be received by 15 July 1985 and mailed to: Professor Robert Resek, Chair, Search Committee for the Director of IGPA, Office of the Vice President for Academic Affairs, 377 Administration Building, 506 South Wright Street, Urbana, Ill. 61801.

The position of **DIRECTOR** of the Lowell Observatory, Flagstaff, Arizona, will be open on 1 July 1986. Applications should be sent to: **Professor Michael C.** J. **Putnam, Sole Trustee, Lowell Observatory, Department of Classics, Brown University, Providence, Rhode Island 02912.** They should include curriculum vitae and the names of at least three people who can serve as references. *Lowell Observatory is an Equal Opportunity Employer.* 

### POSITION AVAILABLE—EMBRYOLOGIST University of Virginia Medical Center

The Department of Obstetrics and Gynecology is seeking a Ph.D. to establish and maintain an in vitro fertilization laboratory. The applicant must have training in embryology or a related scientific field. A junior faculty position will be offered at a competitive salary. Please send curriculum vitae to: Bruce G. Bateman, M.D., Box 387, University of Virginia Medical Center, Charlottesville, Virginia 22908. The University of Virginia is an Equal Opportunity/ Affirmative Action Employer.

## Micolet

### **CAREER OPPORTUNITY**

Nicolet, a leader in computerized biomedical instrumentation, is entering a new and exciting high technology project.

## SPEECH/ACOUSTICS Software engineers

We are seeking experienced Software Engineers to work on a development project involving signal processing for the hearing impaired. Positions are available for work on instrumentation, human interface software, and signal processing algorithms.

Applicants must have a BS in electrical or computer engineering or equivalent. Direct experience in software-based product development and/or speech/acoustic signal processing techniques is required.

We offer an excellent salary, medical, dental, life and LTD insurance, 401 (k) retirement savings plan, PAYSOP and stock purchase plan.

If you are interested in pursuing this opportunity, send your credentials to **Robert W. Lovely, Nicolet Biomedical Instruments, P.O. Box 4287, Madison, WI. 53711-0287. (608) 273-5036.** Nicolet is an equal opportunity employer M/F/H.



### Chairman Department of Anesthesiology

Memorial Sloan-Kettering Cancer Center is seeking an outstanding individual to chair its Department of Anesthesiology.

The leader of this academic department, which includes a pain unit and a pediatric anesthesia program, will also oversee a graduate training program, which is collaborative with New York Hospital-Cornell University Medical College. In addition, this position provides exciting opportunities for investigative programs.

Candidates or nominators should write: William R. Fair, M.D. Chairman, Search Committee Memorial Sloan-Kettering Cancer Center 1275 York Avenue New York, New York 10021

An Equal Opportunity/Affirmative Action Employer

# GC/MS Specialist Metabolism Studies

Stauffer Chemical Company has a challenging opportunity for an experienced Mass Spectrometrist in the Analytical Chemistry laboratory at its Environmental Health Center in Farmington, CT. The successful applicant will work as part of a team of chemists and biochemists working on metabolism and pharmacokinetic studies for the identification and characterization of metabolites in biological systems.

To qualify, you should possess a Ph.D. in Chemistry or equivalent education and experience, and an extensive background in mass spectrometric techniques applied to metabolism studies.

Stauffer offers on-going growth opportunities, excellent salary and an attractive package of company-paid benefits. The Stauffer' Environmental Health Center is adjacent to the University of Connecticut Health Center, and is located in one of the state's most attractive, semi-rural towns. To apply, please send your resume, a brief description of your



resume, a brief description of your experience, and salary requirements in complete confidence, to: Mrs. P. Frutchey, STAUFFER CHEMICAL COMPANY, 400 Farmington Avenue, Farmington, CT 06032. We are an Equal Opportunity Employer M/F.

# Veterinary Pathologist

Stauffer Chemical Company, an international industry leader, is seeking a Veterinary Pathologist to participate in a variety of subchronic, chronic and special studies involving oral, dermal and inhalation toxicology/pathology. This position offers excellent opportunities for collaborative

programs with staff in mutagenesis/carcinogenesis, reproductive biology/teratology, analytical chemistry, and metabolism/pharmacokinetics.

The successful applicant must have a DVM degree, American College of Veterinary Pathologists certification and 5-10 years' experience in toxicologic pathology.

Stauffer offers on-going growth opportunities, excellent salary and an attractive package of company-paid benefits. The Stauffer Environmental Health Center is adjacent to the University of Connecticut Health Center, and is located in one of the state's most attractive, semi-rural towns. To apply, please send your resume, a brief description of your



resume, a brief description of your resume, a brief description of your experience, and salary requirements in complete confidence, to: Mrs. P. Frutchey, STAUFFER CHEMICAL COMPANY, 400 Farmington Avenue, Farmington, CT 06032. We are an Equal Opportunity Employer M/F.

**DIRECTOR**, Lung Biology Center, San Francisco General Hospital, Professor of Medicine (in residence series).

The Department of Medicine, University of California, San Francisco, has created a position at the professor level to serve as the director of a newly created Lung Biology Research Center. Individual will be responsible for designing the research facility and developing a first-class basic research program with an orientation to occupational lung diseases. Will report to the chief of the Medical Service at San Francisco General Hospital and relate to the Occupational Medicine and Chest Divisions as well as to the Cardiovascular Research Institute.

Applicants should send curriculum vitae to: Jay A. Nadel, M.D., University of California, San Francisco, 1315–Moffitt Hospital, Cardiovascular Research Institute, San Francisco, Calif. 94143. The University is an Affirmative Action/Equal Opportunity Employer.

**ESTERASE BIOCHEMISTRY**—Postdoctoral position for individual with background in evolutionary biology and protein biochemistry to continue studies of the kinetic properties of Esterase 6 from *Drosophila melanogaster*. Starting date: 1 July 1985. Send a résumé, copies of three recent papers, and names, addresses, and telephone numbers of four references to: Dr. Rollin C. Richmond, Department of Biology, Indiana University, Bloomington, Ind. 47405. An Affirmative Action/Equal Opportunity Employer.

### **EVOLUTIONARY BIOLOGIST**

The Department of Biology, University of California at San Diego, invites applications for a tenure-track faculty position, preferably at the assistant professor level, in the area of evolutionary biology. The interests of the appointee should complement those of the existing population biology group. Applicants who combine quantitative/theoretical skills with experimental field and/or laboratory studies will be favored. The appointee must have a Ph.D. and have had postdoctoral training and is expected to conduct a vigorous research program. Salary and rank will be commensurate with qualifications and experience. Submit curriculum vitae, three letters of recommendation, and a statement of research interests by 15 July 1985 to: Dr. Sandra Vehrencamp, Population Biology Search Committee, Biology C-016, University of California at San Diego, La Jolla, Calif. 92093.

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

### FACULTY POSITIONS IN MOLECULAR BIOLOGY

The Molecular Biology and Virology Program at the Sloan-Kettering Institute and the Sloan-Kettering Division of the Cornell University Graduate School of Medical Sciences is seeking applications from molecular biologists for several tenure-track faculty positions. The potential recruit should be using modern genetic, molecular biological, and biochemical techniques to study problems in the general area of prokaryotic and eukaryotic cellular or viral gene expression and gene replication. The specific rank of appointment will be commensurate with the candidate's experience and achievements. This is a rapidly expanding program consisting of 20 independent faculty members with diverse research interests who are committed to basic research and the training of graduate students. Please submit your curriculum vitae, present and future research plans, and names of at least three referees to: **Dr. Robert Krug or Dr. Jerard Hurwitz, Sloan-Kettering Institute, 1275 York Avenue, New York, N.Y. 10021**.

IMMUNOLOGIST/GENETICIST: Small, newly established company engaged in biomedical laboratory services and manufacture and distribution of diagnostic reagents is seeking a Ph.D. with training in genetics and immunology to guide laboratory operations, review and approve test results, and direct R&D activities. Consultation readily available from internationally recognized scientists affiliated with company. Midwest location. Competitive salary and opportunity to share in future growth of company. Send curriculum vitae and other information to: **Box 135, SCIENCE.** 

### POSITIONS OPEN

#### FACULTY POSITIONS IN DEVELOPMENTAL BIOLOGY

The Molecular Biology and Virology Program at the Sloan-Kettering Institute and the Sloan-Kettering Division of the Cornell University Graduate School of Medical Sciences is seeking to fill several tenure-track positions in the area of prokaryotic and eukaryotic developmental biology. Individuals will be expected to establish independent research programs that utilize genetic and molecular approaches to the analysis of model pro- and eukaryotic organisms. Applicants should submit their curriculum vitae, a brief statement of research accomplishments and goals, and the names of three references to: Dr. Ora M. Rosen, Sloan-Kettering Institute, 1275 York Avenue, New York, N.Y. 10021.

#### FACULTY POSITION IN IMMUNOPHARMACOLOGY

The School of Pharmacy, University of California at San Francisco (UCSF), seeks an outstanding scientist for a tenure-track position at the assistant or beginning associate professor level in the Department of Pharmacy. We are particularly interested in an individual whose research interests will complement the departmental strengths in drug delivery and pharmacodynamics. Specific areas of interest might include immunomodulation for therapeutic purposes, drug targeting by antibodies, the development of immunologic therapeutic agents, the development of immunologic indices to monitor drug efficacy and toxicity or the formulation of mathematical models of the immune system. Applicants should have a Ph.D., M.D., or M.D./Ph.D. and be committed to develop or continue a first-rate active research program. Teaching responsibilities will be in the professional and graduate curriculum. Applicants should submit curriculum vitae, three letters of reference, and a statement on present and future research interests by 15 August 1985 to: Dr. Francis C. Szoka, Jr., School of Pharmacy, 926-S University of California, San Francisco, Calif. 94143. UCSF is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

#### FACULTY POSITION

The Department of Biochemistry of the Kirksville College of Osteopathic Medicine invites applications for a full-time, tenure-track position at the rank of assistant professor. The department is currently composed of nine Ph.D. members and is committed to excellence in both education and research. Candidates must have a Ph.D. in biochemistry plus at least 2 years of postdoctoral experience and permanent U.S. residency. Preference will be given to individuals with teaching experience at the medical school level and with an established record of research productivity. Teaching responsibilities will include full participation in the lecture, conference, and laboratory sections of two courses in biochemistry and one in nutrition. Research responsibilities will include maintaining a productive research program and securing the extramural funding to support this program. Although candidates in all fields of biochemistry can be considered, a background in nutrition is desirable. Applications must be received by 30 August 1985. Applications must be received by 30 August 1985. Applications, an outline of their proposed research program, and the names and addresses of at least three references to: Dr. Richard J. Cenedella, Chairman, Department of Biochemistry, Kirksville, College of Osteopathic Medicine, 800 West Jefferson, Kirksville, Mo. 63501.

The Kirksville College of Osteopathic Medicine is an Equal Opportunity/Affirmative Action Employer.

Applications are invited for a VISITING INSTRUC-TOR position in PARASITOLOGY to begin 15 August 1985, although a 1 January 1986 start date may be considered. Candidates will be responsible for teaching general parasitology, fall and spring semesters, and would be expected to actively participate in a research program dealing with molluscan immunity to larval schistosomes. Initial appointment is for 2 years with a possible third-year extension. Send three letters of recommendation, curriculum vitae, and reprints to: Dr. T. P. Yoshino, Department of Zoology, University of Oklahoma, 730 Van Vleet Oval, Norman, Okla. 73019.

### POSITIONS OPEN

### FACULTY POSITION IN PLANT CELL TRANSFORMATION

ASSISTANT/ASSOCIATE PLANT PHYSIOLO-GIST, 11 months, tenure-track, beginning 1 September 1985. The successful candidate will be expected to develop a basic research program in the area of plant cell transformation utilizing techniques of protoplast fusion, Ti plasmids, somaclones, and so forth, with emphasis on tropical plants of agricultural significance. Candidates must have a Ph.D. in a relevant field of plant science and present evidence of the ability to carry out the above program. In addition, the associate rank requires 5 years of experience as assistant professor or equivalent. Submit letter of application, curriculum vitae, and three confidential letters of recommendation to: Chairman, Department of Botany, HITAHR, University of Hawaii, 3190 Maile Way, Honolulu, Hawaii 96822, by 31 July 1985. An Equal Opportunity Employer.

#### FACULTY POSITIONS DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY

The Department of Biochemistry and Molecular Biology, Louisiana State University (LSU) Medical Center, invites applications for 12-month, tenuretrack faculty positions at the level of assistant, associate, or full professor. Applicants should have postdoctoral or additional experience and are expected to establish a strong, independent research program in the Medical Center. All areas of biochemical research will be considered. Both the Medical Center and department have undergone substantial expansion in the last 5 years. In addition to the School of Graduate Studies, the Medical Center includes Dental, Medical, and Nursing Schools, and the School of Allied Health Professions. Interest and excellence in teaching is expected. Applicants should send curriculum vitae, bibliography, a threepage summary of research goals, and the names of three references to the following: Robert Roskoski, Jr., Head, Department of Biochemistry and Molecular Biology, LSU Medical Center, 1100 Florida Avenue, New Orleans, La. 70112.

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

HEMATOLOGIST/ONCOLOGIST—BC/BE physician/hematology/oncology to serve as staff physician at VA Medical Center, Durham, N.C. Position requires skills in clinical oncology and clinical protocol work. Employment is contingent on academic appointment at Duke University. Curriculum vitae and references should be submitted to: Personnel Service (05B), VA Medical Center, 508 Fulton Street, Durham, N.C. 27705.

An Equal Opportunity Employer

INSECT PHYSIOLOGIST. Assistant professor, 12month, tenure-track, research/teaching. Minimum qualifications: Ph.D. or equivalent doctorate in entomology or related discipline by time of appointment with graduate-level coursework in insect physiology, dissertation research, or postdoctoral work involving insect physiology and insect pathogens or parasitoids. Conduct physiological or biochemical research leading to the development of insect pathogens or parasitoids as insect control agents. Teach graduate-level courses in insect physiology and in the applicant's specialty area. Advise and train graduate students. Send a letter of application, curriculum vitae, transcripts of all college work, and three letters of recommendation by 1 September 1985 to: Dr. Richard L. Jones, Department of Entomology, University of Minnesota, St. Paul, Minn. 55108. Position available 1 November 1985. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.

### MOLECULAR BIOLOGIST

Tenure-track position at the assistant professor level for a molecular biologist. Applicant must have at least 2 years of postdoctoral experience and demonstrated accomplishment in eukaryote gene expression studies. Expertise in recombinant DNA technology essential. Ph.D. or M.D. Send curriculum vitae, a statement of research interest, and the names and addresses of three references to: Dr. Ralph Weichseleaum, Professor and Chairman, Department of Radiation Oncology, Biological Sciences Division, The University of Chicago, Box 440, 5841 South Maryland Avenue, Chicago, Ill. 60637. An Affirmative Action/Equal Opportunity Employer.

### ASSOCIATE VICE PROVOST FOR RESEARCH THE UNIVERSITY OF TENNESSEE, KNOXVILLE

The University of Tennessee, Knoxville invites nominations and applications for the position of Associate Vice Provost for Research.

The candidates should have an earned doctorate or equivalent degree plus dual university and industrial experience in the areas listed:

 (i) science and/or engineering qualifications in a supporting area of information systems implementation; e.g. computer science applications or computer-base systems engineering. Academic planning experience desired;

(ii) ability to communicate with executive and senior management of Government, Industries and Academia with equal ease as well as an ability to communicate with Research & Development performers;

 (iii) industrial experience in technological development and application that support advanced product development. Strategic technical or Research & Development planning experience desired;

(iv) experience in the definition, development, and maintenance of computer based information systems that support Research & Development decision making, management, competitive performance, and distribution-utilization of Research & Development results;

(v) experience in developing Research & Development proposals for grants and contracts from Government and Industry.

Applications should include a letter of interest, a curriculum vitae, and the names and addresses of five persons who can serve as references. Closing date for receipt of completed applications is July 15, 1985.

Address all nominations and applications to:

Associate Vice Provost for Research Search Committee Office of the Vice Provost University of Tennessee, Knoxville 404 Andy Holt Tower Knoxville, TN 37996-D140

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

### Postdoctoral Scientist Medicinal Chemistry

The Medicinal Chemistry Department of SK&F Laboratories has a postdoctoral position available for an individual with the following experience:

- Ph.D. in Biochemistry or Protein Chemistry
- Protein isolation/characterization experience including size exclusion, ion exchange, and affinity chromatography; electrophoresis (1D and 2D)
- Experience in kinetics, receptor binding and/or equilibrium dialysis binding assays with proteins
- Previous experience with structural proteins (tubulin, actin, myosin) preferred
- Experience with affinity and photoaffinity labelling of proteins is desirable.

Postdoctoral positions are temporary, one year assignments renewable for a second year upon mutual agreement.

We are located near Valley Forge, PA in a new state-of-the-art research facility and offer an excellent salary, benefits, and relocation package. Please forward your c.v. to George P. Kissell, Jr., Manager of Personnel Relations, SK&F Laboratories, 1590 Spring Garden St., Philadelphia, PA 19101. Equal Opportunity Employer, M/F/H/V.





U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL RESEARCH SERVICE

### SUPERVISORY MICROBIOLOGIST (IMMUNOLOGY), PLUM ISLAND ANIMAL DISEASE CENTER, GREENPORT, NY

ARS is seeking a Research Leader (Supervisory Microbiologist) to lead and conduct research on immunology on foreign animal diseases such as foot-and-mouth disease and African swine fever. Research is broad with responsibility for other staff. Candidate must be knowledgeable in humoral and cellular immune mechanisms, relationship of histocompatibility complexes, purification and synthesis of antigens, gene and cell cloning including monoclonal antibody applications, epitope mapping, immune potentiators and antigen delivery systems. At least 3 years of experience/training above the Ph. D. level or equivalent is desirable with demonstrated research accomplishments in at least one area of immunology concerned with infectious diseases. Must be a U.S. citizen. Salary is commensurate with experience—GM-14 (\$44,430-\$57,759) or GM-15 (\$52,262-\$67,940). For information on the research program/position, contact Dr. J. Callis, 516-323-2500. For information on qualification requirements and application should be sent to: Dolores Kauffman, 301-344-3950. Applications in BARC-West, Beltsville, MD 20705. Applications must be received by July 31, 1985.

USDA IS AN EQUAL OPPORTUNITY EMPLOYER. WOMEN AND MINORITIES ARE URGED TO APPLY.

### TOXICOLOGIST, ONCOLOGIST, TERATOLOGIST, GENETICIST, PHARMACOLOGIST

The Health and Environmental Review Division Office of Toxic Substances of the U.S. Environmental Protection Agency, Washington, DC has a number of permanent and temporary full time positions available for scientists in the above disciplines with a salary range of \$26,381 to \$48,876.

#### **Duties and responsibilities**

Review and evaluate chemical toxicity data in the candidate's discipline area. Develop health hazard and risk assessments on industrial chemicals based on the analysis of test data on the chemical, physical and biological properties of the chemical under review, structural analogues, metabolites and other relevant data. Formulate, update and review testing procedures and protocols to be used by industry in performing required testing of chemicals.

### Qualifications

Ph.D. degree or its equivalent in oncology, genetics, pharmacology, toxicology, teratology or other allied subject. Broad knowledge of the above areas with emphasis on testing systems and interpretation of test data. Ability to communicate effectively both orally and in writing.

U.S. citizenship is required. The work is performed in an office environment and does not involve laboratory research.

Submit a SF-171 (Personal Qualifications Statement), transcript, and the names of three persons who can be contacted for references no later than July 31 1985.

US Environmental Protection Agency Personnel Management Division (PM 212) 401 M. Street, S.W. Washington, DC 20460 ATTN: Terry Thomas THE USEPA IS AN EQUAL OPPORTUNITY/

THE USEPA IS AN EQUAL OPPORTUNITY/ AFFIRMATIVE ACTION EMPLOYER

### DIRECTOR OF INSTRUMENT DEVELOPMENT

Unit of a Fortune 50 company located in the Chicago metropolitan area. has a unique opportunity available for an innovative and creative individual who possesses a dynamic user-oriented background in the areas of developing analytical instrumentation. Successful candidate will have a demonstrable track record in one or more of the following areas:

. photon detection systems . development of optical detectors

- development of optical detectors
   applied experience in mathematics
   high level (applied) software development
- . laboratory automation and robotics

Candidate will work closely with Engineering and Marketing in the development of new analytical instrumentation in the areas of nuclear/fluorescence/UV spectrometry, advanced concepts in multi-dimensional spectroscopy, et.al., for use in research, biotechnology and clinical laboratory.

Credentials require advanced degree in physics, physical chemistry or allied sciences and a minimum of five years in a related position. Our employees are aware of this opening.

We offer an excellent salary and benefits package. Please send resume with salary history to:

Box 142, SCIENCE.

Equal opportunity employer, m/f

### ASSISTANT BIOPHYSICIST

Ph.D. in Crystallography. 2-3 years Post-doctoral training. Extensive general knowl-edge in the fundamental concepts of protein structure as well as techniques and methodology of structure determination with special expertise to determine the structure of photosynthetic reaction centers and that of antibody structure and some knowledge of immunology; experience handling membrane protein crystals. Knowledge of FORTRAN, BASIC, and IBM Job Control Language to program the IBM, VAX, and PDP 11/23 computers. Expertise in programming in Evans and Sutherland computer graphics system and in modifying the interactive computer graphics program package FRODO for protein structure refinement and analysis. All of the above evidenced by publications in technical journals.

Design, conduct and direct experiments independently or collaboratively on the structure and function of biological macromolecules. The emphasis of the experiments will be to determine the atomic structure of the photosynthetic reaction centers or immunoglobulin using x-ray diffraction techniques on single crystals. Salary: \$2700/mo.-40 hours per week/8:30am-5:00pm. Geographical area of employment: Southwest suburb of Chicago. SEND RESUME TO: Illinois Job Service, 910 South Michigan Avenue -Room 333, Chicago, IL 60605, Attention: Dennis Doligala, REFERENCE #4608-D. AN EMPLOYER PAID AD-This is a University affiliated position.

INDUSTRIAL RESEARCH MICROBIOLO-GIST—Supervises scientific research in contract projects in the areas of food microbiology, water microbiology, and animal health. Duties include: active laboratory research in bacterial culturing, active laboratory research in bacterial culturing, enzyme immunoassays, oligonucleotide-DNA probe synthesis, gene cloning, DNA hybridization, and designing and developing rapid diagnostic as-says. Other duties include: supervising technicians, conducting team meetings, and periodic formal oral presentations on research projects to clients.

Requirements include doctorate in microbiology and at least 3 years of postdoctoral experience in microbiology and bacterial genetics. Must be proficient in applied microbiology, especially in the areas of bacterial analysis in water and food production. of bacterial analysis in water and food production, with emphasis in designing and developing rapid screening methods for detecting bacterial contami-nation and pathogens. Also require expertise in bacterial gene cloning and manipulation and general recombinant DNA procedures. Skills in monoclonal antibody production, enzyme-linked immunosor-bent assays (ELISA), and excellent oral communi-cation skills are also required. Forty hours per week; \$3083 ner month \$3083 per month.

Send résumé and copy of this ad to: Job Order Number 5028189, Department of Employment and Training, 1123 North Eutaw Street, Room 201-B, Baltimore, Maryland 21201. Job location in Rockville, Maryland

### **MOLECULAR BIOLOGIST**

The Biology Department at the University of Cali-fornia, San Diego, invites applications for a tenure-track position at the assistant professor level, salary range \$25,500 to \$32,200. Applicants must have Ph.D. and should have a minimum of 2 years of postdoctoral experience. The department is interest-ed in applicants who have a commitment to applying molecular techniques to problems of the pervous where a community of the second secon should forward their curriculum vitae with names of three references and selected reprints by 15 July 1985 to: Dr. A. I. Selverston, Chairman, Search Committee, Department of Biology, B-022, University of California, San Diego, La Jolla, Calif. 92093.

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

### MOLECULAR GENETICS/BIOCHEMISTRY MEHARRY MEDICAL COLLEGE

MEHARRY MEDICAL COLLEGE is making a con-certed effort in at least three departments to strengthen the area of molecular biology-molecular genetics. Two positions are available in the Depart-ment of Biochemistry at the level of assistant or associate professor. The department expects to fill these positions in spring 1986. Preference will be given to applicants with expertise in regulation of gene expression who plan to study or are studying contemporary problems in eukaryotic or prokaryotic molecular genetics, using recombinant DNA tech-nology. Applicants should have broad training in biochemistry and molecular biology and will be expected to develop and/or maintain a funded re-search program of high quality and to participate in the graduate and professional school teaching pro-grams of the department of biochemistry. Applicants MEHARRY MEDICAL COLLEGE is making a congrams of the department of biochemistry. Applicants should send curriculum vitae, names of four individ-uals who may be contacted for reference, and a summary of research interests or on-going project Summary of research interests of on-going project to: Ifeanyi J. Arinze, Ph.D., Chairman, Department of Biochemistry, Meharry Medical College, Nashville, Tenn. 37208. Meharry Medical College is an Equal Opportunity/Affirmative Action Employer.

### PHYSIOLOGIST

The West Virginia School of Osteopathic Medi-The West Virginia School of Osteopathic Medi-cine (WVSOM) invites applications for a tenure-track appointment at the **assistant professor** level. Applicants should have a systems physiology back-ground (Ph.D.) with expertise in the cardiovascular system. Successful candidate will exhibit a strong commitment to teaching and demonstrate an active interest and background in research. Applications, including current curriculum vitae and these latters of professor schemes change to the

and three letters of reference, should be sent to: Michael K. Cope, Ph.D., Associate Dean for Academ-ic Affairs, West Virginia School of Osteopathic Medi-cine, 400 North Lee Street, Lewisburg, West Virginia 24901, no later than 15 July 1985.

WVSOM is an Affirmative Action/Equal Opportunity Employer.

### POSITIONS OPEN

#### MOLECULAR BIOLOGIST

The Cullen Eve Institute, Baylor College of Medi-The Cullen Eye Institute, Baylor College of Medi-cine (BCM), Houston, Texas, is seeking a candidate for assistant professor (tenure-track) in the area of molecular biology. The successful candidate will be expected to develop an independent research pro-gram, to train graduate students and postdoctoral fellows, and to participate in the medical school teaching program. Applicants should submit curricu-lum vitae, reprints, summary of future research plans, and the names of three references to: Dan B. Jones, M.D., Chairman, Department of Ophthalmol-ogy Baylor College of Medicine One Baylor Plaza ogy, Baylor College of Medicine, One Baylor Plaza, Houston, Texas 77030. Deadline: 1 September 1985. BCM is an Equal Opportunity Employer.

MOLECULAR BIOLOGIST (assistant research biochemist) at the University of California, San Francisco, to apply genetic approaches to study the development of tolerance to ethanol using neural cells in culture as a model system. It will also be possible for candidates to pursue other research interests. Send curriculum vitae and names of references to: Dr. Ivan Diamond, Director, Gallo Center, Building 1, Room 101, San Francisco General Hospi-tal, San Francisco, Calif. 94110.

An Affirmative Action/Equal Opportunity Employer

MOLECULAR GENETICIST—Immediate opening for individual at assistant investigator level to partic-ipate in molecular studies related to human genetics. Areas of laboratory investigation to include abnor-Åreas of laboratory investigation to include abnor-mal sexual development, chromosome instability, genetic consequences of chromatid exchange, and/ or cloning of genes related to human cancer. Two to 3 years of postdoctoral experience in molecular biology are required. Job security with opportunity for advancement, competitive salary and excellent benefits midst stimulating scientific environment of East Side, Manhattan. Submit curriculum vitae to: Director, Laboratory of Human Genetics, The New York Blood Center, 310 East 67 Street, New York, N.Y. 10021. Equal Opportunity Employer.

### NEUROENDOCRINOLOGIST DEPARTMENT OF PHYSIOLOGY QUEEN'S UNIVERSITY

A vacancy exists for an experienced neuroendo-crinologist. The preferred applicant should have the Ph.D. and/or the M.D. degree, several years of teaching experience, and a record of independent research of high quality. The applicant will be ex-pected to lead an active research program and to participate in undergraduate and graduate teaching. The facilities for research are outstanding and the The facilities for research are outstanding and the appointment is a regular one under tenure regula-tions. The appointment will be made at a level appropriate to the candidate's qualifications. Appli-cations are encouraged from candidates of either sex. Applicants should submit curriculum vitae, a brief statement of their research interests and objecorier statement of their research interests and objec-tives, selected reprints, and the names of three referees from whom a confidential assessment of research and teaching abilities may be obtained to: Dr. V. C. Abrahams, Department of Physiology, Queen's University, Kingston, Ontario, Canada K7L 3N6.

**NEUROSCIENCE RESEARCH POSITIONS** avail-NEUROSCIENCE RESEARCH POSITIONS avail-able for postdoctoral scientist interested in adult and/or child psychopathology at a Research Psychi-atric Institute affiliated with New York University, Department of Psychiatry. Tenure-track and aca-demic appointment available for individual with es-tablished competence. Generous heapfits. New Vork State position in Rockland suburb of New York State position in Rockland suburb of New York City. Send curriculum vitae to: Search Com-mittee, NATHAN S. KLINE INSTITUTE FOR PSY-CHIATRIC RESEARCH, Orangeburg, N.Y. 10962. An Equal Opportunity Employer, MIF.

PLANT ECOLOGIST AND SOIL CHEMIST/TECH-PLANT ECOLOGIST AND SOIL CHEMIST/TECH-NICIAN. A research program investigating long-term effects of fire and grazing on ecological phe-nomena in tallgrass prairie has openings for two research associates. Master's degrees are minimum requirements. Training in systematic botany and experience in recognition of flora of tallgrass prairie is a requirement for the plant ecologist position. An individual experienced with soil analysis, autoana-lyzer techniques and with laboratory organizational skill is heing sought for the chemist position. skill is being sought for the chemist position. Send a résumé and names of three references by 1 August 1985 to: D. W. Kaufman, Division of Biology, Kansas State University (KSU), Manhattan, Kans. 66506. KSU is an Equal Opportunity/Affirmative Action Employer.

### POSITIONS OPEN

### PHYSICAL BIOCHEMISTRY MEHARRY MEDICAL COLLEGE

The Department of Biochemistry has a tenure-track position available at the assistant or associate profesposition available at the assistant or associate profes-sor level. Applicants should have broad training in biochemistry and will be expected to develop and/or maintain a funded research program of high quality and to participate in the graduate and professional school teaching programs of the Department of Biochemistry. Applicants should send curriculum vitae, names of four individuals who may be contact-ed for reference, and a summary of research interests or on-going project to: Ifeanyi J. Arinze, Ph.D., Chairman, Department of Biochemistry, Meharry Medical College, Nashville, Tenn. 37208. Meharry Medical College is an Equal Opportunity/Affirma-tion Artice England tive Action Employer.

PLANT SYSTEMATICS—POSTDOCTORAL POSI-TION. Two-year position beginning 1 November 1985 to study generic delimitation in Maloideae 1985 to study generic delimitation in Maloldeae (Rosaceae). Extensive use of cladistic and phenetic methods necessary, background with Rosaceae use-ful but not required. Send résumé and three letters by 1 September 1985 to: Dr. Kenneth R. Robertson, Illinois Natural History Survey, 607 East Peabody Drive, Champaign, Illinois 61820. An Equal Opportu-nity/Affirmative Action Employer.

Several positions are available at Geo. J. Ball, a major horticultural company in northern Illinois. The positions and qualifications are:

- 1) **PLANT TISSUE CULTURE**: four positions; Ph.D., M.S., or B.S. with single or combined background and experience in any of the following areas:

  - a) In Vitro micropropagation,
    b) Acclimation of tissue cultured plants in vivo,
    c) Product system development in tissue culture,
    d) Plant pathology,
    c) Direct burgle
  - e) Plant physiology, and f) Cell culture.
- 2) GREENHOUSE MANAGER: B.S. preferred with experience in greenhouse management in horti-cultural crops.
- 3) MICROPROPAGATION: B.S. with experience in laboratory micropropagation.

Send résumé to

Dr. Irwin Y. E. Chu Vice President Research & New Project Development Geo. J. Ball, Inc. P.O. Box 335 West Chicago, Ill. 60185 Equal Opportunity Employer

POSTDOCTORAL POSITION available immediately at the University of California, San Francisco, to study molecular mechanisms underlying the development of tolerance to ethanol using neural cells in culture as a model system. Send curriculum vitae and names of references to: Dr. Ivan Diamond, Director, Gallo Center, Building 1, Room 101, San Francisco General Hospital, San Francisco, Calif. 94110. An Affirmative Action/Equal Opportunity Employer

POSTDOCTORAL POSITION at Harvard Medical School available immediately in the Mailman Re-search Center of McLean Hospital. Research deals with the neurobiology of protein and neuropeptide metabolism and the role of proteolysis in neuropsy-chiatric disorders in aging. Particular emphasis is on the neuronal cytoskeleton. Experience or interest in one of the following areas is desired. Immunochemone of the following areas is desired. Immunochem-istry, RIA, immunocytochemistry, tissue culture, and protein purification and characterization. Ad-dress curriculum vitae and letters of reference to: Ralph A. Nixon, M.D., Ph.D., Mailman Research Center, Ralph Lowell Laboratories, McLean Hospi-tal, 115 Mill Street, Belmont, Mass. 02178. An Equal Opportunity Employer.

### POSTDOCTORAL POSITIONS IN IMMUNO-TOXICOLOGY

Two NIH-sponsored positions (2- to 3-year term) are available in September 1985 in the Division of Phar-macology-Toxicology to study the role of the im-mune system in mediating drug-induced liver toxici-ty. Applicants should have experience with basic immunological skills, theories, and concepts. Salary commensurate with experience. Please send curricu-um vite and name of three references to: A law um vitae and names of three references to: A. Jay Gandolf, Ph.D., Department of Anesthesiology, Uni-versity of Arizona, Tucson, Ariz. 85724. Equal Op-portunity/Affirmative Action Employer.

### **DIRECTOR** Department of Biological Research

Due to an internal promotion, a key scientific leadership position is available in the Product Research Function of Searle R&D. This position is central to the development of objectives leading to the discovery of new therapeutic entities. Program areas being pursued include cardiovascular and renal diseases, gastrointestinal diseases, autacoid mediated conditions, and disorders of the central nervous system.

The successful candidate will hold a Ph.D. in Pharmacology or a closely related biomedical science discipline. Ten to fifteen years experience beyond the doctorate is required in an industrial or academic setting.

Other key attributes required for this position include a high level of interaction and communication skills, as this position interfaces widely throughout R&D.

In exchange for your expertise, you will receive an outstanding salary, eligibility for a management incentive bonus and a full relocation package. Searle R&D offers a stimulating growth oriented environment. To apply in confidence, send resume, salary requirements and references to:

B. Gardner --- #7EP-14

Searle Research & Development Division of G.D. Searle & Co. 4901 Searle Parkway Skokie, IL 60077

Equal Opportunity Employer M/F/H



### **POSTDOCTORAL POSITION**

**POSTDOCTORAL POSITION IN AUDITORY ELEC-TROPHYSIOLOGY** is available at the Los Alamos National Laboratory. Participate in studies of the encoding of speech sounds in the auditory system. Candidates with training in neurophysiology, experimental psychology, speech science, or other related fields are encouraged to apply. We offer a comprehensive benefits package with a starting salary range of \$27,900 to \$29,376.

Interested candidates should send a copy of their resume to Dr. Donal G. Sinex, Los Alamos National Laboratory, LS-DO, MS M881, Los Alamos, New Mexico 87545, or call Dr. Sinex at (505) 667-1623.

To formally apply, please send your resume, bibliography, three letters of reference and graduate and undergraduate transcripts to: Carol M. Rich

DIV 85-DH Personnel Administration Division Los Alamos National Laboratory Los Alamos, New Mexico 87545 an Affirmative Action/Equal Opportunity Employer U.S. CITIZENSHIP REQUIRED University of California



## BW BIOTEC INC.

A newly formed joint venture between the Chicago-based biotechnology consulting firm, **BERNARD WOLNAK AND ASSOCIATES**, and **TOYO ENGINEERING CORPORATION** of JAPAN, is currently looking for qualified individuals in a number of disciplines to join our scientific staff. The focus of the company is to provide laboratory, development, scale-up, process design, and process engineering services to the biotechnology industry.

### ANALYTICAL BIOCHEMIST

The successful candidate will be responsible for the development of analytical methods which are an integral part of our development programs. A Ph.D. degree in Biochemistry, Analytical Biochemistry, or a related field, and at least 3 years of postdoctoral or industrial experience is required. Extensive experience in chromatographic procedures, especially HPLC is essential. Familiarity with other analytical methods such as electrophoresis, NMR and mass spectroscopy and their biological applications is also desirable.

### **MOLECULAR BIOLOGIST / GENETICIST**

The individual will have a major role in a research effort to improve yields of antibiotics from selected strains of a variety of microorganisms. Applicants should have a Ph.D. in microbiology or a related discipline, and extensive experience with the growth and genetics of antibiotic-producing organisms.

### CELL BIOLOGIST / TISSUE CULTURE SPECIALIST

The successful candidate will be responsible for establishing and directing our mammalian cell biology laboratory. A Ph.D. degree in molecular biology, cell biology, or a related field is required as well as a broad-based knowledge of cell biology. Extensive experience with various methods for the growth of cells including large scale cultivation is very desirable.

Located in Chicago, **BW BIOTEC INC.** offers attractive salaries and benefits as well as a dynamic urban environment with access to excellent cultural, educational and recreational pursuits. For prompt confidential consideration, please submit your resume to:

An equal opportunity employer.

Director of Human Resources **BW BIOTEC INC.** 3570 N. Avondale Ave. Chicago, Illinois 60618



POSTDOCTORAL FELLOW/RESEARCH ASSO-CIATE POSITIONS. Two postdoctoral (Ph.D.) and one research associate (B.S.) positions are anticipated starting 1 July 1985. Two projects are ongoing in our laboratory. One deals with the structure of the glucocorticoid receptor protein and the other with the effects of steroid hormones on proto-oncogene expression, cellular proliferation, and cell death in steroid-responsive neoplastic cell lines. Send curriculum vitae and the names of three references to: Dr. Wayne V. Vedeckis, Department of Biochemistry and Molecular Biology, Louisiana State University Medical Center (LSUMC), 1901 Perdido Street, New Orleans, La. 70112. LSUMC is an Equal Opportunity/ Affirmative Action Institution.

**POSTDOCTORAL POSITION.** One full-time position in COMPARATIVE MOLECULAR GENETICS effective 1 August 1985 to study organization of multi-gene families and repetitive DNAs in Equidae. Experience in Southern blotting, molecular cloning, and related techniques desirable. Send letter, curriculum vitae, and refrences to: Dr. Oliver A. Ryder, San Diego Zoo, Box 551, San Diego, Calif. 92112. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION (1 to 2 years) available immediately at an Eye Research Institute studying possible oxidative mechanisms of lens cataract formation. Applicants should have recent Ph.D. (biochemistry or cell biology) experience in protein purification, gel electrophoresis, and immunochemical procedures. Send curriculum vitae and three references to: Dr. Frank Giblin, Institute of Biological Sciences, Oakland University, Rochester, Mich. 48063.

Massachusetts Institute of Technology (MIT)—POST-DOCTORAL POSITION available immediately to study biochemical and genetic regulation of growth factor receptors. Strong background in recombinant DNA technology and/or protein chemistry is preferred. Send curriculum vitae and references to: Dr. M. R. Rosner, Department of Applied Biological Sciences, MIT/E18-564, 77 Massachusetts Avenue, Cambridge, Mass. 02139. Refer to Job Number C85-146. MIT is Equal Opportunity/Affirmative Action Employer.

THREE POSTDOCTORAL POSITIONS available in the Developmental Genetics Laboratory, Department of Pediatrics, Johns Hopkins University, Baltimore, Maryland. Recent Ph.D.'s required in mammalian developmental biology, neurobiology, and cell/molecular biology. Positions are for research in: (i) early embryonic and placental development of aneuploid mice (with J. Gearhart), (ii) cerebellar development in trisomic mice and mouse chimeras (with M. L. Oster-Granite), and (iii) control of growth and differentiation of embryonal carcinoma cells in culture (with J. W. Littlefield). Send curriculum vitae and references to: Dr. John Gearhart, Developmental Genetics Laboratory, CMSC 604, Johns Hopkins Hospital, 600 North Wolfe Street, Baltimore, Md. 21205.

An Equal Opportunity/Affirmative Action Employer. Applications from all qualified candidates are welcome; applications from minorities and women are encouraged.

POSTDOCTORAL POSITION available immediately to study the effects of metals on phagocytosis in marine molluscs. Background in cell biology and biochemistry essential. Send curriculum vitae and names of three references to: Dr. Thomas C. Cheng, Director, Marine Biomedical Research Program, Medical University of South Carolina, P.O. Box 12559 (Fort Johnson), Charleston, S.C. 29412. Telephone: 803-795-7490. An Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study role of viruses (retroviruses) and interferon in AIDS as well as herpes simplex virus infections in experimental animal models. Requires solid and appropriate background; work with Dr. Alvin E. Friedman-Kien, Microbiology Department. (Position A).

ASSISTANT RESEARCH SCIENTIST for work studying postreceptor molecular signals. Ph.D. in biochemistry/pharmacology required. (Position B). Send résumés and three references, indicating position of interest, to: Joan Harmon, Personnel Department, New York University Medical Center, 560 First Avenue, New York, N.Y. 10016. An Affirmative Action/Equal Opportunity Employer, M/F. A POSTDOCTORAL POSITION is available to take part in the purification of membrane receptors (alpha-adrenergic and peptidergic) and production of antibodies against them. Experience in protein purification and HPLC techniques are required. Salary will be determined by qualifications. Please submit curriculum vitae and the names of two references before 1 August 1985 to: Dr. J. BOCKAERT, Centre de Pharmacologie-Endocrinologie, B.P. 5055, 34033 Montpellier, France.

POSTDOCTORAL POSITION available to participate in a multidisciplinary analysis of the major histocompatibility complex in neural tissue. Candidates with training in protein chemistry, molecular genetics, neuroanatomy, or developmental biology will be considered. Send résumé, reprints, and names of references to: Dr. Lois Lampson, Department of Anatomy/G3, University of Pennsylvania School of Medicine, Philadelphia, Pa. 19104. An Equal Opportunity/Affirmative Action Employer.

We have a POSTDOCTORAL POSITION available immediately for a molecular biologist/biochemist to participate in ongoing research concerned with the molecular biology of enterobacterial common antigen (ECA). Applicants should have a strong background in biochemistry and molecular biology. Interested individuals are invited to send curriculum vitae and the names of three references to: Dr. Paul D. Rick, Department of Microbiology, c/o Personnel Division, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, Md. 20814-4799. Curriculm vitae will not be returned. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately in research-intensive department for Ph.D. in biochemistry, cell or molecular biology, or immunology. Research deals with the mechanism of action at the receptor and postreceptor level of polypeptide growth factors that induce cellular transformation and differentiation. Experience in the following areas is desirable: receptor biochemistry; hybridoma technology; protein and peptide purification; hormonal regulation of gene expression. Send curriculum vitae and names of three references to: Dr. J. Massachusetts Medical School, 55 Lake Avenue North, Worcester, Massachusetts 01605. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION—Available during 1985/1986 to study the mechanism of action of nerve growth factor and its role in the transformed phenoclonal antibodies to the NGF receptor and the clone NGF receptor gene. Experience in monoclonal antibodies, membrane proteins, and DNA technology desirable. Support available for 3 years at NIH skill. Submit curriculum vitae and three letters of recommendation to: Dr. Alphonso H. Roth, THE WISTAR INSTITUTE, 36th and Sprue Streets, Philadelphia, Pa. 19104. Equal Opportunity Employer.

A POSTDOCTORAL POSITION IN MOLECULAR VIROLOGY is available immediately to study the role of hepatitis B virus and/or woodchuck hepatitis virus in the development of hepatocellular carcinoma in humans and woodchucks. The research will include molecular and cellular studies on the structure and function of viral DNA integrations cloned from primary hepatomas. Experience in molecular biology is desirable. The position is available for 2 years with the possibility of extension. Send curriculum vitae and names of three references to: Dr. Charles E. Rogler, Department of Medicine, Liver Research Center, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, N.Y. 10461.

**POSTDOCTORAL RESEARCH ASSOCIATE**—A postdoctoral position to study the mechanism of interaction of pyrrolizidine alkaloids with nucleophilic biological substrates is available. Mass spectrometry will be used extensively. A Ph.D. in organic or physical organic chemistry is required. Previous research experience in mass spectrometry is essential and experience with chromatographic systems and high field NMR is desirable. Salary range: \$19,000 to \$21,000, depending on experience and qualifications. Send curriculum vitae and three letters of recommendation by 12 July 1985 to: Dr. Max Deinzer, Department of Agricultural Chemistry, Oregon State University is an Affirmative Action/Equal Opportunity Employer and complies with Section 504 of the Rehabilitation Act of 1973.

### POSITIONS OPEN

POSTDOCTORAL POSITION IN NEUROBIOLO-GY available for cellular and molecular studies of a novel growth factor for CNS neurons and lymphocytes (*Nature (London)* **307**, 546 (1984)). Candidates should have experience in molecular biology, tissue culture, protein purification, immunology, or neuroanatomy. Send curriculum vitae, statement of research interests, and names of two references to: Mark Gurney, Ph.D., Department of Pharmacology, University of Chicago, 947 East 58 Street, Chicago, III. 60637.

**POSTDOCTORAL POSITION** available August 1985 on a 3-year NASA grant on the genetic effects of microgravity and radiation aboard the Space Shuttle, using a yeast model system. Ph.D. in genetics or cell biology with strong background in eukaryotic genetics is required. Computer skills highly desirable. Send curriculum vitae and three letters of reference to: Dr. Carlo V. Bruschi, Department of Microbiology, School of Medicine, East Carolina University, Greenville, N.C. 27834-4354. Affirmative Action/Equal Opportunity Employer.

#### POSTDOCTORAL POSITIONS HOWARD HUGHES MEDICAL INSTITUTE/PHILADELPHIA

Fully-funded postdoctoral positions in molecular biology and molecular genetics are now available at the Howard Hughes Medical Institute of the University of Pennsylvania. Active research projects include: transcriptional and translational control of eukaryotic gene expression, mechanisms of cellular transformation and gene amplification, molecular mechanisms of chromatin inactivation, and the application of molecular genetics to studies of inherited disease.

For information, please contact:

Dr. Steve Liebhaber, Coordinator Howard Hughes Medical Institute Department of Human Genetics Medical Laboratories Building/G3 University of Pennsylvania School of Medicine Philadelobia, Pa. 19104

TWO POSTDOCTORAL POSITIONS in bacterial ion transport: (i) genetics and molecular biology of primary and secondary calcium transport systems and (ii) biochemistry of primary cation and anion pumps. Experience in recombinant DNA methodology and/or purification of membrane proteins desirable. Send curriculum vitae and three letters of references to: Dr. Barry P. Rosen, Department of Biological Chemistry, University of Maryland School of Medicine, Baltimore, Maryland 21201. An Equal Opportunity/Affirmative Action Employer.

### BOSTON AREA POSTDOCTORAL POSITION

Two-year, well-paid, postdoctorate for person with experience in molecular biology/cell culture/embryology/endocrinology. Interests of this laboratory center on differentiation and hormone regulation of gene expression and cell division in the frog liver system. Available starting 1 September 1985. Send curriculum vitae and three letters of recommendation to:

Dr. Larry Wangh Department of Biology Brandeis University Waltham, Mass. 02254

POSTDOCTORAL RESEARCH ASSOCIATE POSI-TION available in neuroendocrinology of reproduction from fall 1985, with interest in steroid feedback, neuropeptide and neurotransmitter interactions, and behavior. Strong background in neurochemistry desirable. Send curriculum vitae and three references to: Dr. S. P. Kalra, Department of Obstetrics and Gynecology, University of Florida College of Medicine, P.O. Box J-294, JHMHC, Gainesville, Fla. 32610.

PROJECT DIRECTOR—NATURAL RESOURCES MANAGEMENT. Washington based nonprofit seeks a director for an AID-funded technical assistance project in environment and natural resource management. Applicants must have a technical background in a related field and at least 2 years of experience working in developing countries. Experience essential in producing quality reports within deadlines; and managing a government contract, budget, and staff. Applicants should send résumé and salary expectations to: **Box 134, SCIENCE.** 

# Senior Scientist

### Protein Purification

Hoffmann-LaRoche, a leader in biotechnology, has an opportunity for a PhD to join a team working on a wide variety of protein purifications and characterizations derived from recombinant DNA technology.

Qualifications include a PhD in biochemistry. One or two years postdoctoral experience would be helpful.

Roche offers an outstanding compensation package and a highly professional environment conducive to growth and achievement.

Please send resume to: Eleanor M. Malone, Professional Employment & Staffing Specialist

SCIENCE

**SCIENCE Offers** 

"The Four-Day Close"

We now offer our recruitment advertisers the conve-

nience formerly found only in daily newspapers. We call it "The Four-Day Close." Instead of reserving

space a month or more in advance, you now have until

just four days before the issue is mailed to its 160,000-

Film (right-reading, emulsion face down) or art, 1/4 or

<sup>1/2</sup> page size only, and insertion order must reach: SCI-ENCE, Room 107, 1515 Massachusetts Avenue, N.W., Washington, D.C. 20005, by 3 p.m. Mondays

(except for legal holidays when material must reach Washington by 3 p.m. Fridays). Because space is limit-

ed, the four-day close page will be reserved on a first-

Now you don't have to wait for the professional you

need as soon as possible. Nor must you advertise in

a Sunday paper that pans a lot of sand, but not much

gold. Scientific employers know that SCIENCE ads fill

- \$2679.50.

For reservations call: 202-467-4456.

the job better. Now they fill it faster, too.

You can call it "Instant Recruitment."

We call it "The Four-Day Close."

Cost: 1/4 page — \$1552.50, 1/2 page -





An equal opportunity employer

plus subscribers

come, first-served basis.

Products that matter from people who care

# NUCLEOTIDE BIOCHEMISTRY

Due to continued growth, we have immediate need for the following biochemists to become part of our innovative tumor biology group.

### SENIOR RESEARCH BIOCHEMIST

An opportunity to do fundamental research in the area of purine and pyramidine metabolism in normal and tumor cells. The applicant should have a PhD in Biological Sciences with 1-2 years of post-doctural experience in biochemistry and enzymology of nucleotide metabolism. The ability of the applicant to work independently as demonstrated by publication records and to work well as part of a group is essential.

### BIOCHEMIST

To qualify, you must possess a BS or MS in Biological Sciences. Background and experience in cell culture and enzymology is essential.

Merrell Dow Research Institute is a subsidiary of Dow Chemical located in suburban Cincinnati. We offer excellent compensation, comprehensive benefits and relocation assistance. If you are interested in fundamental research and would like to work for a rapidly growing research institute, send your curriculum vitae with names of three references to:

### Merrell Dow

Personnel Services Manager MERRELL DOW RESEARCH INSTITUTE 2110 East Galbraith Road Cincinnati, OH 45215 Equal Opportunity Employer M/F/H/V Equal Opportunity Employer M/F/H/V

Los Angeles, Ninneapolis, New Growth opportunities Chicago Milwaukee Growth opportunities Chicago to combine scientific expertise and marketing skills. Responsibilities are to establish effective relationships within key medical institutions, providing scientific liaison and indepth information also have training responsibility at the Representative, Medical Staff, and Pharmacy levels. Travel approximately 30%.

Qualifications include PhD in Pharmacology, Pharmacy, or other Life Sciences required. Must possess initiative, strong communication skills, and interest in Marketing.

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



### 28 JUNE 1985

#### POSTDOCTORAL/RESEARCH ASSOCIATE POSITION

Available 1 July 1985 to study bioaccumulation of Available 1 July 1985 to study bioaccumulation of trace metals in estuarine organisms; metal regulation by metal-binding proteins. Knowledge of protein separation, chromatographic, and isotope tech-niques desirable. Salary: \$20,000 upwards, depen-dent on experience. Send curriculum vitae and three bittors of procemendation to Dr. Devid A. Wright letters of recommendation to: Dr. David A. Wright, Chesapeake Biological Laboratory, Center for Envi-ronmental and Estuarine Studies, University of Mary-land, P.O. Box 38, Solomons, Md. 20688. The Uni-versity of Maryland is an Equal Opportunity Institu-tion with respect to both education and employment.

PROJECT ASSOCIATE: Will isolate and characterize the endothelium-derived relaxation factor from rabbit thoracic aorta. Analyze structure using gasrabbit thoracic aorta. Analyze structure using gas-chromatographic mass spectrometric techniques and interpret the mass spectrum. Perform synthesis of the putative chemical structure using organic chemi-cal synthesis and pharmacological techniques. Re-quires Ph.D. in pharmacy with major in pharmaceu-tical biochemistry. Education to include 2 years of research in area of bioorganic chemistry. Minimum of 2 years of research experience in each of follow-ing kink performance liquid horgenetarchy puda ing: high performance liquid chromatography; nucle-ar magnetic resonance; mass spectrometry; organic ar magnetic resonance; mass spectrometry; organic chemical synthesis; enzymic purification; nanogram level of biologically-active material. Full-time; \$18,000 per year. This is an employer-paid ad; An Equal Opportunity Employer. Send résumé and two letters of reference by 2 August to: Eileen Breitweiser, Job Service Number 118-0668, 201 East Washington Avenue, Madison, Wis. 53707.

#### PROJECT LEADER

Biologics Corporation, a division of TechAmerica Group, a leader in the animal health field, has need Group, a leader in the animal health held, has need of a project leader in virus research and develop-ment. Ph.D. with postdoctoral experience and su-pervisory ability will direct technical staff. Requires a background in virology, cell culture, immunology, and bacteriology. Prior experience in the animal health industry is a desirable, but not mandatory, requirement. Please send curriculum vitae to: Direc-tor of Research and Development, Biologics Corpora-tion, 2720 North 84 Street, Omaha, Neb. 68134. Telephone: 402-393-7440.

### **RESPIRATORY PHYSIOLOGY**

A postdoctoral fellowship (M.D. or Ph.D.) is available for research training in respiratory physiology with an eight-member group of faculty investigators. Send letter describing research interests, curriculum vitae, and names and addresses of three references to: Donald Bartlett, Jr., M.D., Professor of Physiology, Dartmouth Medical School, Hanover, N.H. 03756. An Affirmative Action/Equal Opportunity Employer

SCIENTIST—NUMERICAL METHODS IN RHE-OLOGY. We have developed systematic studies of the flow behavior of blood and blood-like non-Newtonian fluids using a rapid response Couette Viscometer. We will study arterial flow models and are seeking an individual whose background in nu-merical methods and biomechanics allows initiation of an analysis of time-dependent fluids. Our visco-metric analyses allow measurement of thixotropy, viscoelasticity, and resistance to vorticity and sugviscoelasticity, and resistance to vorticity and sug gest that the continuum mechanics approach could allow extension of these observations to general flow. Please describe your background and career interests. Competitive salary based on applicant's background and ability to generate an independent program. Send résumes and three references to: Dr. Donald McMillan, Research Director, Hal B. Wallis Facility, Eisenhower Medical Center, 39,000 Bob Hope Drive, Rancho Mirage, California 92270.

#### VIRAL IMMUNOLOGIST

The Lady Davis Institute for Medical Research, in affiliation with McGill University, has a position for an independent investigator at the assistant profes-sor level. Candidates should hold an M.D. or Ph.D. degree and have at least 2 years of postdoctoral experience.

Please send curriculum vitae, list of publications, a Please send curriculum vitae, list of publications, a short description of proposed research, and names of three referees to: Dr. N. Kalant, Director, Lady Davis Institute for Medical Research, 3755 Cote St. Catherine Road, Montreal, Quebec, Canada H3T 1E2.

In accordance with Canadian Immigration regula tions, applications from Canadian citizens and land-ed immigrants will be considered first.

### POSITIONS OPEN

RESEARCH ASSISTANT. B.S. or M.S. degree in the biological sciences with experience in cytogenet-ics. Projects involve karyotyping, banding and in situ hybridization studies of mouse embryos, fetus-es, and cells in culture. Salary will be commensurate with experience. Send résumé, including references, to: Dr. John Gearhart, Developmental Genetics Labo-ratory, Pediatrics, CMSC 604, Johns Hopkins Hospi-tal, 600 North Wolfe Street, Baltimore, Md. 21205.

An Equal Opportunity/Affirmative Action Employer. Applications from all qualified candidates are wel-come; applications from minorities and women are encouraged.

RESEARCH ASSOCIATE (POSTDOCTORAL) for molecular studies of metalloprotein isomers (isoferritins) using modern biochemical, immunological, and genetic methods. Large biomedical center near New York. Send curriculum vitae and names of three references to: Dr. W. H. Massover, University of Medicine and Dentistry of New Jersey-New Jersey Medical School, 100 Bergen Street, Newark, N.J. 07103. Equal Opportunity/Affirmative Action Employer.

**RESEARCH CHEMIST.** U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), Fruit and Vegetable Chemistry Laboratory, Pasadena, California, is seeking a chemist to work in the area of iron-transport compounds (siderophores and phytosiderphores). Appointment for 2 years. The work involves isolations, structure determina-tions, and study of function. Candidate must have training in organic chemistry/biochemistry and some experience in methods of separation and NMR. Ph.D. is desirable. U.S. citizenship is required. Salary commensurate with experience (\$26,381 to \$21,610). Econometric proceeding approximation of the second Salary commensurate with experience (\$20,361 to \$31,619). For information on research program con-tact: R. M. Horowitz, telephone: 818-796-0239; for information on application procedure, contact: Rita Millard, telephone: 301-344-3138, USDA, ARS, Per-sonnel Division, Personnel Operations Branch, W02, Room 107, Building 003, BARC-West, Beltsville, Maryland 20705. Equal Opportunity Employer.

**RESEARCH POSITION** available 1 September 1985 for Ph.D. with at least 2 years of prior postdoctoral experience to examine interrelationship of compoexperience to examine interrelationship of compo-nents of enteric nervous system with gastrointestinal endocrine cell function. Specific areas of interest relate to cholergic, adrenergic, and GABAergic con-trol of gut regulatory peptide release. Experience in cell and nerve culture, radioimmunoassay, and immunocytochemistry desirable. Salary and status negotiable. Curriculum vitae and three references to: Richard F. Harty, M.D., Department of Internal Medicine, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Neb. 68105. An Affirmative Action/Equal Opportunity Employer.

#### STRUCTURAL GEOLOGY/TECTONICS

The Department of Geological Sciences of Colum-The Department of belogical sciences of column-bia University seeks to make a tenure-track or tenured faculty appointment in the broad field of structural geology/tectonics. The area of specializa-tion is open, but the successful candidate should be able to interpret field observations in the context of quantitative analytical models, and will be expected to initiate a vigorous research program at Lamontto initiate a vigorous research program at Lamont-Doherty Geological Observatory as well as to teach graduate and undergraduate courses. Columbia Uni-versity is an Affirmative Action/Equal Opportunity Employer. Please reply by 31 July 1985 to: Professor David Walker, Chairman, S.G.T. Search Committee, Department of Geological Sciences, Lamont-Doherty Geological Observatory, Palisades, New York 10964.

TRANSPORT PHYSIOLOGIST—GASTROEN-TEROLOGIST: New position in the cell biology of intestinal transport being developed. Applicant must have experience in performing in vitro and in vivo transport studies in experimental animals and in man. Knowledge of transport equations and mathe-matical models required, as well as working knowl-edge of computer programming of these models. Must have 3 years of training in internal medicine and 2 years of postdoctoral fellowship training in gastroenterology. Must also be able to teach all aspects of clinical gastroenterology and all routine endoscopic diagnostic procedures.

aspects of clinical gastroenterology and an routine endoscopic diagnostic procedures. Send letter of application, summary of research interests, and curriculum vitae to: Dr. John M. Dietschy, University of Texas Health Science Center at Dallas, Dallas, Texas 75209. We are an Equal Opportunity/Affirmative Action

Employer.

### POSITIONS OPEN

#### RESEARCH TRAINING IN SALIVARY SECRETION

Positions available starting summer 1985 at the Uni-Positions available starting summer 1985 at the Uni-versity of Washington for research training in the biochemistry, cell biology, microbiology, physiolo-gy, pharmacology and/or pathology of salivary se-cretion, Applicants should have Ph.D. or profession-al degree (M.D., D.D.S., D.V.M., or equivalent) and must be U.S. citizens or have permanent visas. Graduate programs leading to Ph.D. or M.S. are available. Stipends: \$15,996 to \$30,000, depending upon purceipene Sand survivum vitros three refer available. Stipends: \$15,996 to \$30,000, depending upon experience. Send curriculum vitae, three refer-ences and statement of research interests to: Dr. Kenneth Izutsu, Department of Oral Biology, SB-22, University of Washington, Seattle, Wash. 98195, at earliest possible date. An Affirmative Action/Equal Opportunity Employer.

SENIOR SCIENTIST with Ph.D. in nuclear engineering to carry out research development of magnet system design which includes magnetic field devel-opment and use; mechanical and cryogenic design; superconductor use; and new system analytical de-sign and experimental development. Includes writing grants and implementing grant proposals with experience with at least one grant. Minimum of 6 years of work experience in applied superconductiv-ity; 1 year of work experience in magnetic field code ity; I year of work experience in magnetic field code development and use; and minimum of 6 years of research experience in cryogenics area are required. Minimum of ten original publications in analytical and experimental applied superconductivity re-quired. Minimum of 40 hours per week; \$52,500 per year to begin 1 September 1985. Affirmative Action/ Equal Opportunity Employer. Résumé and three references due by 29 July to: Elleen Breitweiser, Job Service, 206 North Broom Street, Madison, Wisconsin 53703. This is an employer-paid ad.

### COURSES

Aspen, Colorado, 14 to 17 August 1985, at the Given Institute of Pathobiology. FOUR-DAY COURSE de-signed for clinical and basic scientists. Intensive update by national authorities on basic and clinical update by national automities on basic and clinical aspects of molecular biology. CME credit. Registra-tion fee: \$300. Organized by University of Colorado School of Medicine. For information, contact: Con-tinuing Medicine Education Office, University of Col-orado Health Sciences Center, 4200 East 9 Avenue, Denver, Colo. 80262. Telephone: 303-394-5195.

### **FELLOWSHIPS**

# The Johns Hopkins University Department of Anesthesiology and Critical Care Medicine POSTDOCTORAL FELLOWSHIP IN RESEARCH

Applications are invited for this position available immediately to study the molecular biology of hu-man cytochrome P450. The applicant must be cre-ative and highly motivated to carry out independent experimentation utilizing human cytochrome P450 under study.

M.D. and Ph.D. required with 1 to 2 years of experience in molecular biology. Contact:

Roy C. Levitt, M.D. The Johns Hopkins University Department of Anesthesiology and Critical Care Medicine Blalock 1410 Baltimers, Marwland 21205 Baltimore, Maryland 21205 Telephone: 301-955-7609

### MARKETPLACE

### UNIQUE LIPOSOMES

Tissue-Specific Avoiding RE System TECHNOLOGY UNLIMITED, INC. P.O. Box 723 Wooster, Ohio 44691 216/262-3600

### **Information for Contributors**

The Editors of Science

Manuscripts should be addressed to the Editor, *Science*, 1515 Massachusetts Avenue, NW, Washington, D.C. 20005. Submit three copies together with a letter of transmittal giving

1) the names and telephone numbers of the authors;

2) the title of the paper and a statement of its main point;

3) three to eight keywords to be used for indexing;

4) the names, addresses, telephone numbers, and fields of interest of four to six persons in North America but outside your institution who are qualified to referee the paper;

5) the names of colleagues who have reviewed the paper;

6) the total number of words (including text, references, and figure and table legends) in the manuscript; and

7) a statement that the material has not been published and is not under consideration for publication elsewhere.

Before being reviewed in depth, most papers are rated for their interest and overall suitability by a member of the Board of Reviewing Editors. When papers are submitted in disciplines for which there is no appropriate member of the Board of Reviewing Editors, the initial screening is done by editorial staff members in consultation with outside experts in those areas. Papers that are not in the highest rating category are returned to the authors within about 2 weeks. The others are reviewed in depth by two or more outside referees. Authors are then notified of acceptance, rejection, or need for revision within 6 to 10 weeks from the date of receipt. As stated in the editorial of 18 January 1985 (Science, volume 227, page 249), there can be no resubmissions, either of papers returned after initial screening or of papers returned after in-depth review.

### **Conditions of Acceptance**

When a paper is accepted for publication in *Science*, it is understood by the editors that any materials necessary to verify the conclusions of the experiments reported will be made available to other investigators under appropriate conditions.

It is also understood that a paper accepted by *Science* will not be released to the press or the public before its publication.

If there is a need in exceptional cases to publicize research findings in advance of publication, the AAAS Office of Communications (202-467-5441) must be consulted.

### **Selection of Manuscripts**

In selecting papers for publication, the editors give preference to those of general significance that are well written, well organized, and intelligible to scientists in different disciplines. An attempt is made to balance the subject matter in all sections of *Science*. Membership in the AAAS is not a factor in selection.

Papers accepted for publication are edited to improve the accuracy and effectiveness of communication and to bring them within the specified length limits. When the author's meaning is not clear, the editor may consult the author by telephone; when editing is extensive, the manuscript may be returned to the author for approval and retyping before the type is set.

Six categories of signed papers are published: general articles, research articles, reports, letters, technical comments, and book reviews.

General articles. General articles (up to 5000 words) are expected to (i) review new developments in one field that will be of interest to readers in other fields; (ii) describe a current research problem or a technique of interdisciplinary significance; or (iii) discuss some aspect of the history, logic, philosophy, or administration of science and public affairs. Readers should be able to learn from a general article what has been firmly established and what are unresolved questions; speculation should be kept to a minimum.

Many of the general articles are solicit-

ed by the editor. Both solicited and unsolicited articles undergo review.

General articles should include a note giving authors' names, titles, and addresses; a summary (50 to 100 words); an introduction that outlines for the general reader the main point of the paper; and brief subheadings to indicate the main ideas. The reference list should not be exhaustive; a maximum of 40 references is suggested.

*Research articles.* A research article (up to 4000 words) is expected to contain new data representing a major breakthrough in its field. The article should include an author note, abstract, introduction, and sections with brief sideheads. There should be a short introductory section outlining for the general reader the main point of the paper, a description of the experiments and the results, and then a discussion or conclusion. A maximum of 30 references is suggested.

Reports. Reports are expected to contain important research results or reliable theoretical calculations whose essence can be expressed briefly. Preference is given to reports of discoveries that will be of broad interdisciplinary interest or of unusual interest to the individual discipline. Reports should include an abstract and an introductory paragraph. The total number of words, including the references and notes and figure and table legends, should not exceed 2000. A maximum of 20 references is suggested. Figures and tables together should occupy no more than half a printed page.

Letters. Letters are selected for their pertinence to material published in Science or because they discuss problems of general interest to scientists. Letters pertaining to material published in Science may correct errors; provide support or agreement; or offer different points of view, clarifications, or additional information. Personal remarks about another author are inappropriate. Letters may be reviewed by outside consultants. Letters selected for publication are intended to reflect the range of opinions received. The author of the Science paper in question is usually given an opportunity to reply.

Letters must be typed double-spaced. All letters are acknowledged by postcard; authors are duly notified as to whether or not their letters are to be published. Preference is given to letters that do not exceed 250 words. Letters accepted for publication are frequently edited and shortened in consultation with the author.

Technical Comments. Technical com-

ments (up to 500 words) may criticize articles or reports published in *Science* within the previous 6 months or may offer useful additional information. Discussions of minor issues or priority claims are not appropriate, nor are questions that can be resolved by private correspondence. The authors of the original paper are usually asked for an opinion of the comments and are given an opportunity to reply in the same issue if the comments are accepted. The comments, and sometimes the reply, are subjected to the usual review procedures.

*Book Reviews*. The selection of books to be reviewed and of reviewers is made by the editors. Instructions and length specifications accompany the books when they are sent to reviewers.

### **Manuscript Preparation**

*Typing*. Use double-spacing throughout the text, tables, figure legends, and references and notes and leave margins of at least 2.5 centimeters. Put your name on each page and number the pages starting with the title page.

*Titles*. Titles should be short, specific, and amenable to indexing. For general articles the maximum length is 52 characters and spaces; for research articles and reports the maximum is 108 characters.

Summaries or abstracts. These should convey to the general reader the main point of the paper and outline the results or conclusions. A reader should be able to learn from the summary the purpose of the study and the reason for its importance.

*Text.* A brief introduction should portray the broad significance of the paper.

The whole text should be intelligible to readers in more than one discipline. Technical terms should be defined.

Units of measure. Use metric units. If

measurements were made in English units, give metric equivalents.

*Symbols and abbreviations*. Define all symbols, abbreviations, and acronyms.

*References and notes*. Number references and notes in the order in which they are cited in the text. Place references cited only in tables or figure legends after the text references. Use conventional abbreviations for well-known journals; provide complete titles for other journals. For references with up to five authors provide all the names; for more than five, provide the name of the first author only. For style, see a recent issue of *Science*.

Acknowledgments. Gather all acknowledgments into a brief statement at the end of the references and notes.

Informed consent. Investigations on human subjects must include a statement indicating that informed consent was obtained after the nature and possible consequences of the studies had been fully explained.

Figures. For each figure submit three glossy prints of sufficient size to permit relettering but not larger than 22 by 28 centimeters (81/2 by 11 inches). Transparencies, slides, negatives, or oversized figures cannot be accepted. On the back of every figure write the first author's name and the figure number and indicate the correct orientation. Authors requesting the use of color will be asked to pay \$600 for the first figure and \$300 for each additional figure, to cover the cost of reprints. Illustrations reprinted from other publications must be credited. It is the author's responsibility to obtain permission to reprint such illustrations in Science

Tables. Tables should supplement, not duplicate, the text. They should be numbered consecutively with respect to their citation in the text. Each table should be typed, with its legend (double-spaced), on a separate sheet. Give each column a heading with units of measure indicated in parentheses. Do not change the unit of measure within a column.

*Equations and formulas*. Use quadruple-spacing around equations and formulas that are to be set off from the text. Define all symbols.

Statistical presentations. Report the uncertainty associated with results, including the specific measure of uncertainty used and the sources of error in it. Probabilities from statistical tests of significance should be subordinated to the reporting of results and associated uncertainties. Limitations to the generalizability of the results should be explicitly stated.

### **Printing and Publication**

*Proofs and reprints*. One set of galley proofs is sent to the authors. An order blank for reprints accompanies the proofs.

Scheduling. Papers are scheduled for publication after Science has received corrected galley proofs from the authors. The time between acceptance of papers and mailing of galley proofs to authors may be 4 to 8 weeks, and the time between receipt of authors' galley proofs by Science and publication may be 4 to 6 weeks. There may be delays for papers with tables or figures that present problems in layout, for papers with color figures, for papers accompanied by cover pictures, and for papers that exceed the length limits.

### **Cover Photographs**

Particularly good photographs that pertain to a paper being submitted will be considered for use on the cover. Submit prints (not slides, negatives, or transparencies) with the manuscript and indicate in the letter of transmittal that a possible cover picture is enclosed.

# MOLECULAR BIOLOGIST

The New Technology Research Division of Du Pont has an important opportunity for a Research Scientist to coordinate and conduct a variety of longrange research and development projects and to design new techniques and procedures in the area of molecular biology. Specifically, you will be involved in the development of invitro diagnostics using recombinant DNA Technology.

Your qualifications must include a PhD in Molecular Biology/Microbiology/Genetics, with 3–5 years' related industrial or academic experience. For candidates with an academic or postdoctoral background, we expect a strong publications history. In addition, experience in a clinical atmosphere and a supervisory background would be helpful.

For confidential consideration, please send curriculum vitae with list of references to: Ms. Erin Moore, Du Pont/NEN Products, 549 Albany Street, Boston, MA 02118. An equal opportunity employer.



### A UNIQUE OPPORTUNITY EXISTS....

Join a small group of friendly, highly motivated scientists and computer specialists using an advanced computer system, **PROPHET** to facilitate state-of-the-art research in the life sciences.

**PROPHET** is a graphics-oriented shared computer resource tailored to meet the unique data management and analysis needs of pharmacologists, medicinal chemists, molecular biologists and other biomedical scientists studying the interaction of chemical and biological systems. We pride ourselves that a hallmark of the **PROPHET** approach is the sense of sharing and strong communication among **PROPHET** users and with the support staff. We need you to help maintain and further develop the exten-

sive applications software. If you are interested in working in a dynamic, challenging environment, and:

- have a strong science background (BS, MS, or PhD in Biochemistry, Molecular Biology, or, preferably, Biostatistics or Pharmacology);
- 2. have at least 2 years experience in applications programming and familiarity with current computer science concepts;
- would enjoy supporting our user community of research by giving training sessions and visiting user sites, and;
- 4. have good interpersonal skills,
- then please send your resume immediately to Harold Perry.

### **BBN Laboratories**

10 Moulton Street, Cambridge MA 02238 BBN Laboratories is an equal opportunity employer m/f/h/v

### NATIONAL INSTITUTES OF HEALTH PUBLIC HEALTH SERVICE DEPARTMENT OF HEALTH AND HUMAN SERVICES

OPENING DATE: July 1, 1985 CLOSING DATE: July 31, 1985

(All applications must be postmarked by closing date)

The National Institutes of Health invites nominations and applications for the position of Director, Division of Research Grants (DRG).

The Director, DRG, directs an organization that provides staff support to the Office of the Director, NIH, in the formulation of grant and award policies and procedures; provides central receipt of all PHS applications for research and research training support and makes initial referral to PHS components; assigns NIH applications to supporting Institutes/Divisions and to DRG initial review groups; provides scientific review of NIH Research Grants, National Research Service Awards, and research career development applications; collects, stores, retrieves, analyzes and evaluates management and program data needed to administer extramural programs; reviews and analyzes the character and direction of research and training supported through NIH grants and the resources necessary for such support. The Division's staff includes over 430 employees with a direct budget of 19.8 million dollars, plus responsibility for Chariman's Grants in excess of 6 million dollars.

This is a Civil Service position in the Senior Executive Service (SES), with an authorized salary range from \$61,296 to \$68,700 per annum depending on qualifications. Candidates may be eligible for Physicians Comparability Allowance up to \$10,000 per year. Alternatively, candidates may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service.

The mandatory professional/technical qualifications require that candidates meet the minimum educational requirements for Medical Officer, GS-602, or Health Science Administrator, GS-601, as defined by the U.S. Office of Personnel Management Handbook X-118 – Qualifications Standards for positions under the General Schedule, which is available in Federal Personnel Offices and Federal Job Information Centers. Candidates must also possess familiarity with Federal Grant and award programs, understanding

of the biomedical research community, and skill in negotiating sensitive issues in a scientific environment.

The mandatory managerial/executive qualifications require that candidates have demonstrated competence in the following areas: assuring that key agency and organizational goals are considered in making program decisions; representing the organization in negotiations with other organizations, and establishing working relationships with other program areas and relevant external groups; establishing program goals and the organizational structure and processes required; obtaining and allocating the necessary financial and material resources; developing a work environment that ensures that people are approiately empolyed, effectively and efficiently utilized, and dealt with in a fair and equitable manner; and, establishing procedures for the periodic evaluation of programs, amd making necessary adjustments to assure that appropriate results are being achieved.

Candidates who meet the mandatory qualifications will be further evaluated by the Search Committee on the following factors: training and education, and honors and awards. Additional information may be obtained from Mrs. Helen S. Stafford, (301) 496-4197.

Applications (Personal Qualifications Statement, SF-171) are to be sent to Helen C. Stafford, Executive Secretary, Search Committee for Director, DRG, National Institutes of Health, Building 1, Room 19, Bethesda, Maryland 20205. A current curriculum vitae and bibliography must accompany all applications. Applications of women and/or minority group members are especially solicited.

ALL QUALIFIED CANDIDATES WILL RECEIVE CONSIDERATION WITHOUT REGARD TO RACE, RELIGION, COLOR, SEX, AGE, NATIONAL ORIGIN, LAWFUL POLITICAL AFFILIATION, MARITAL STATUS, UNION MEMBERSHIP, OR ANY NONDISQUALIFYING PHYSICAL OR MENTAL HANDICAP.

### LIQUID SCINTILLATION COUNTING

The Spectral' gives you simultaneous chemical and colour quench correction

Accurate DPM values are of crucial importance for producing meaningful results in liquid scintillation counting. To help achieve such results, a unique feature capable of simultaneously compensating for the effects of chemical and

colour quenching has been incorporated into the recently introduced LKB Wallac 1219 RackBeta 'Spectral' LSC.

Usually chemical quenching is corrected by using a factor derived from a standard chemical quench curve. However, this curve cannot be used to compensate for the effects of colour quenching just as a standard colour quench curve cannot be used to compensate for chemical quenching.

The Spectral LSC can correct for chemical and/or colour quenching in a sample by using the chemical quench curve.



Effect of the Colour Correction Parameter

This is made possible by a patented Colour Correction function which is based on the Spectral Quench parameter using the external standard, SQP (E), and dual multichannel analysis.

The Colour Correction function is just one of the many unique features of the Spectral designed to ensure the accuracy of your DPM results. Contact your local LKB representative to find out

more about the Spectral, the latest 'state of the art' LSC.



LKB Instruments Inc., 9319 Gaither Road, Gaithersburg, Maryland 20877. Tel. (301) 963 3200, telex 646 34, telefax (301) 963 7780. Antwerp (03) 218 93 35 · Athens-Middle East + 30 (1) 894 73 96 · Copenhagen (01) 29 50 44 · London (01) 657 88 22 · Lucerne (041) 55 73 21 Madras (044) 45 28 74 · Moscow (095) 256 · 9002 · Munich (089) 85 830 · Paris (06) 92 86 507 · Rome (06) 39 90 33 · Stockholm (08) 98 00 40 Tokyo (03) 293 - 5141 · Turku (021) 678 111 · Vienna + 43 (222) 92 16 07 · Washington (301) 963 3200 · Zoetermeer (079) 31 92 01 Over 60 qualified representatives throughout the world.