

an exhaustive survey." The present volume contains chapters on mammalogy in Finland (Ann Forstén *et al.*), Poland (Kazimierz Kowalski), Yugoslavia (Beatrica Đulic), Romania (Viorica Simionescu), and Bulgaria (Tsolo Peshev and Kliment Ohridsky). Each chapter gives a brief survey of important institutions, publications, and persons, relevant political events, and the current (up to about 1980) status of mammalogy. Work on fossils is included in the coverage. To all the chapters are appended lists of mammals currently recognized in the country discussed, bibliographies, and simple maps. The volume ends with an account by Gustav Kirk, president of the European Association for the Protection of Mammals, of threats to mammals and protection efforts in Eastern Europe. The projected next volumes are to deal with parts of Africa and the Americas.—K.L.

**Advances in Nuclear Science and Technology.** Vol. 19, Festschrift in Honor of Eugene P. Wigner. JEFFERY LEWINS and MARTIN BECKER, Eds. Plenum, New York, 1987. xx, 489 pp., illus. \$85.

The present volume is dedicated to Eugene P. Wigner in recognition of his contributions to nuclear energy. The book opens with a "reminiscence" of Wigner by A. M. Weinberg, with particular attention to Wigner's work at the Metallurgical Laboratory at the University of Chicago and at the Clinton Laboratories in Oak Ridge between 1942 and 1947, years during which he "invented many of the techniques that we now teach in textbooks of reactor design." Mention is also made of Wigner's interest in energy problems and civil defense. Appended to the reminiscence are an annotated bibliography of Wigner's writings, including reports and memoranda as well as conventionally published items, and a list of the 39 patents he holds. The remainder of the volume consists of four "modern accounts of some of the developments initiated by Wigner": "The PIUS principle and the SECURE reactor concepts" by Kåre Hannerz (Sweden); "PRISM: an innovative inherently safe modular sodium cooled breeder reactor" by P. R. Pluta *et al.* (United States); "Generalized perturbation theory (GTP): a heuristic approach" by A. Gandini (Italy); and "Some recent developments in finite element methods for neutron transport theory" by R. T. Ackroyd *et al.* (United Kingdom).—K.L.

## Books Received

**Apples to Atoms.** Portraits of Scientists from Newton to Rutherford. W. D. Hackmann. National Portrait

Gallery, London, 1987 (U.S. distributor, Schram, Montclair, NJ). 88 pp. Paper, \$19.50. Catalogue of an exhibition.

**An Artificial Intelligence Approach to Test Generation.** Naringer Singh. Kluwer, Norwell, MA, 1986. xiv, 193 pp., illus. \$36.95. Kluwer International Series in Engineering and Computer Science.

**Asymmetries in Time.** Problems in the Philosophy of Science. Paul Horwich. MIT Press, Cambridge, MA, 1987. xvi, 218 pp., illus. \$22.50; paper, \$9.95.

**Axonal Transport.** Richard S. Smith and Mark A. Bisby, Eds. Liss, New York, 1987. xviii, 503 pp., illus. \$78. Neurology and Neurobiology, vol. 25. From a symposium, Calgary, Alberta, July 1986.

**The Aztec Temple Mayor.** Elizabeth Hill Boone, Ed. Dumbarton Oaks Research Library and Collection, Washington, DC, 1987. 513 pp., illus. \$40. From a symposium, Washington, DC, Oct. 1983.

**Basic Complex Analysis.** Jerrold E. Marsden and Michael J. Hoffman. 2nd ed. Freeman, New York, 1987. xiv, 604 pp., illus. \$34.95.

**The Beginning of the Age of Dinosaurs.** Faunal Change Across the Triassic-Jurassic Boundary. Kevin Padian, Ed. Cambridge University Press, New York, 1987. xii, 378 pp., illus. \$75. Based on a symposium, Berkeley, CA, Oct. 1984.

**Better a Shield Than a Sword.** Edward Teller. Perspectives on Defense and Technology. Free Press (Macmillan), New York, 1987. xiv, 257 pp. \$19.95.

**Biological Applications of Raman Spectroscopy.** Thomas G. Spiro, Ed. Vol. 1, Raman Spectra and the Conformations of Biological Macromolecules. xvi, 352 pp., illus. \$59.95. Vol. 2, Resonance Raman Spectra of Polyenes and Aromatics. xii, 376 pp., illus. \$59.95. Wiley-Interscience, New York, 1987.

**Biology.** Neil A. Campbell. Benjamin/Cummings, Menlo Park, CA, 1987. xxiv, 1101 pp. + appendixes, glossary, and index. \$39.95. Benjamin/Cummings Series in the Life Sciences.

**Capillary Liquid Chromatography.** B. G. Belen'kii, E. S. Gankina, and V. G. Mal'tsev. Consultants Bureau (Plenum), New York, 1987. x, 252 pp., illus. \$65. Macromolecular Compounds. Translated from the Russian by R. N. Hainsworth.

**Chitin and Benzoylphenyl Ureas.** James E. Wright and Arthur Retnakaran, Eds. Junk, Dordrecht, 1987 (U.S. distributor, Kluwer, Norwell, MA). x, 309 pp., illus. \$86. Series Entomologica, vol. 38. From a symposium, Hamburg, F.R.G., Aug. 1984.

**Cold Spring Harbor Symposia on Quantitative Biology.** Vol. 51, Molecular Biology of *Homo sapiens*. Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, 1987. Two volumes. xlii, 1229 pp., illus. \$160; paper, \$80. From a symposium, Cold Spring Harbor, June 1986.

**Contributions of Technology to International Conflict Resolution.** H. Chestnut, Ed. Published for the International Federation of Automatic Control by Pergamon, New York, 1987. xiv, 157 pp., illus. \$50. From a workshop, Cleveland, OH, June 1986.

**Controlled Release of Biologically Active Agents.** Richard Baker. Wiley-Interscience, New York, 1987. xvi, 279 pp., illus. \$59.95.

**Cosmology.** The Structure and Evolution of the Universe. G. Contopoulos and D. Kotsakis. Springer-Verlag, New York, 1987. xiv, 235 pp., illus. Paper, \$32.50. Translated from the second Greek edition (Athens, 1984) by M. Petrou and P. L. Palmer.

**Critical Theories of Psychological Development.** Jean M. Broughton, Ed. Plenum, New York, 1987. xxiv, 313 pp. \$39.50. Publications for the Advancement of Theory and History in Psychology.

**Developmental and Comparative Immunology.** Edwin L. Cooper, Claude Langlet, and Jacques Bierné, Eds. Liss, New York, 1987. xxii, 180 pp., illus. \$38. Progress in Clinical and Biological Research, vol. 233. From a congress, Reims, France, July 1985.

**The Developmental Psychology of Music.** David J. Hargreaves. Cambridge University Press, New York, 1987. x, 260 pp., illus. \$39.50; paper, \$14.95.

**Diazo Compounds.** Properties and Synthesis. Manfred Regitz and Gerhard Maas. Academic Press, Orlando, FL, 1986. xii, 596 pp., illus. \$125.

**Dictionary of Coal Science and Technology.** Roy D. Merritt, Ed. Noyes, Park Ridge, NJ, 1987. vi, 384 pp., illus. \$48.

**Disease and Discovery.** A History of the Johns Hopkins School of Hygiene and Public Health, 1916–1939. Elizabeth Fee. Johns Hopkins University Press, Baltimore, MD, 1987. xiv, 286 pp., illus. \$30.

**DNA Replication and Recombination.** Roger McMacken and Thomas J. Kelly, Eds. Liss, New York, 1987. xxvi, 782 pp., illus. \$140. UCLA Symposia on Molecular and Cellular Biology, new series, vol. 47.

**Down to Earth.** Foundations Past and Present. Jean Kerisel. Balkema, Accord, MA, 1987. x, 149 pp., illus. \$29.50.

**Encyclopedia of Artificial Intelligence.** Stuart C. Shapiro, Ed. Wiley-Interscience, New York, 1987. Two volumes. xxiv, 1219 pp., illus. \$149.95.

**Engineering Aspects of Water Law.** Leonard Rice and Michael D. White. Wiley-Interscience, New York, 1987. xii, 206 pp., illus. \$39.95.

**The Enzymes.** Vol. 18, Control by Phosphorylation. Part B, Specific Enzymes (II); Biological Processes. Paul D. Boyer and Edwin G. Krebs, Eds. 3rd ed. Academic Press, Orlando, FL, 1987. xii, 512 pp., illus. \$75.

**Enzymology and Molecular Biology of Carbonyl Metabolism.** Aldehyde Dehydrogenase, Aldo-Keto Reductase, and Alcohol Dehydrogenase. Henry Weiner and T. Geoffrey Flynn, Eds. Liss, New York, 1987. xviii, 447 pp., illus. \$80. Progress in Clinical and Biological Research, vol. 232. From a workshop, Espoo, Finland, June 1986.

**Epistemic Meaning.** Monika Doherty. Springer-Verlag, New York, 1987. xii, 204 pp., illus. \$65. Springer Series in Language and Communication, vol. 21. Translated and revised from the German edition (Berlin, 1985).

**Die erfundene Wirklichkeit.** Wie Wissen wir, was wir zu wissen glauben? Paul Watzlawick, Ed. Piper, Munich, 1986. 326 pp., illus. Paper, DM 14.80.

**Essential Nutrients in Carcinogenesis.** Lionel A. Poirier, Paul M. Newberne, and Michael W. Pariza, Eds. Plenum, New York, 1986. x, 562 pp., illus. \$89.50. Advances in Experimental Medicine and Biology, vol. 206. From a symposium, Bethesda, MD, Feb. 1985.

**Ethics, Science, and Democracy.** The Philosophy of Abraham Edel. Irving Louis Horowitz and H. S. Thayer, Eds. Transaction Books, New Brunswick, NJ, 1987. viii, 318 pp. \$49.95.

**EURIT 86.** Developments in Educational Software and Courseware. Jef Moonen and Tjeerd Plomp, Eds. Pergamon, New York, 1987. xxvi, 726 pp., illus. \$55. From a symposium, Enschede, the Netherlands, 1986.

**Food Policy.** Integrating Supply, Distribution, and Consumption. J. Price Gittinger, Joanne Leslie, and Caroline Hoisington, Eds. Published for the World Bank by Johns Hopkins University Press, Baltimore, MD, 1987. xiv, 567 pp., illus. Paper, \$16.50. EDI Series in Economic Development.

**The Forces Between Molecules.** Maurice Rigby *et al.* Clarendon (Oxford University Press), New York, 1987. x, 232 pp., illus. \$45; paper, \$19.95.

**Foundations of Cognitive Grammar.** Vol. 1, Theoretical Prerequisites. Ronald W. Langacker. Stanford University Press, Stanford, CA, 1987. xii, 516 pp., illus. \$42.50.

**From Schema Theory to Language.** Michael A. Arbib, E. Jeffrey Conklin, and Jane C. Hill. Oxford University Press, New York, 1987. x, 253 pp., illus. \$39.95.

**Frontiers of Physics.** Samuel Gueller. Vantage, New York, 1987. 221 pp., illus. \$16.95.

**The Fulbright Experience, 1946–1986.** Encounters and Transformations. Arthur Power Dudden and Russell R. Dynes, Eds. Transaction Books, New Brunswick, NJ, 1987. xiv, 314 pp. \$29.95.

**Herbals.** Their Origin and Evolution. A Chapter in the History of Botany, 1470–1670. Agnes Arber. Cambridge University Press, New York, 1987. xxxii, 358 pp., illus. paper, \$24.95. Cambridge Science Classics. Reprint, 1938 ed.

**The Historical Development of Quantum Theory.** Vol. 5, Erwin Schrödinger and the Rise of Wave Mechanics. Part 1, Schrödinger in Vienna and Zurich, 1887–1925. Jagdish Mehra and Helmut Rechenberg. Springer-Verlag, New York, 1987. xx, 366 pp. \$54.

**History of the Earth's Atmosphere.** M. I. Budyko, A. B. Ronov, and A. L. Yanshin. Springer-Verlag, New York, 1987. viii, 139 pp., illus. Paper, \$42. Translated from the Russian edition (Leningrad, 1985).

**Homogenization Techniques for Composite Media.** E. Sanchez-Palencia and A. Zaoui Eds. Springer-Verlag, New York, 1987. x, 397 pp., illus. \$40.60. Lecture Notes in Physics, 272. From a course, Udine, Italy, July 1985.

**Hormonal Proteins and Peptides.** Vol. 13, Corticotropin (ACTH). Academic Press, Orlando, FL, 1987. x, 202 pp., illus. \$75.

**Knowledge Representation in Medicine and Clinical Behavioural Science.** Ladislav Kohout and Wyllis Bandler. Abacus, Cambridge, MA, 1986. x, 211 pp., illus. \$35.

**Laboratory Course Manual for Methods in Yeast Genetics.** Fred Sherman, Gerald R. Fink, and James B. Hicks. Cold Spring Harbor Laboratory, Cold Spring Harbor, New York, 1986. 186 pp., illus. Paper, \$25.

## Products & Materials

### *Equation-Solving Program Language*

AUTOMATED PROGRAMMER is an automatic programming system that enables a computer to recognize and solve equations entered in standard two-dimensional mathematical notation and technical English. No knowledge of programming is needed. The language works by invisibly translating the standard equations into Fortran code. Fortran programmers can avoid manual coding of formulas in Fortran by writing an AUTOMATED PROGRAMMER program and linking the resulting Fortran code to their original Fortran program or to a program library. The language operates on the IBM PC family of computers. KGK Automated Systems. Circle 630.

### *High-Speed Backup Program*

Backup Master 2.2 is a backup utility for personal computer hard disks. Ten megabytes of data can be backed up onto 360-kilobyte disks in 8 minutes and onto 1.2-megabyte disks in 4 minutes; MS DOS-formatted disks are no slower than those formatted by proprietary methods. Error correction techniques allow Backup Master 2.2 to restore data from a backup disk that is as much as 13% damaged. Data can be restored from backup disks with missing or damaged file-allocation tables and directory information. Backup Master 2.2 operates on the IBM PC and PS/2 families of computers. Intersecting Concepts. Circle 645.

### *Desktop Workstation*

The 3/60 is a desktop computer workstation that can carry out 3 million instructions per second. Based on the 68020 microprocessor and equipped with a 68881 floating-point coprocessor, the workstation has 4 megabytes of main memory upgradable with 4-megabyte modules to 24 megabytes. Other features include a bit-mapped multiwindow display, an optical mouse, two RS-423 serial ports, and an SCSI port.

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

Monitor options include 8-bit color, grayscale, monochrome, and high-resolution monochrome monitors. The 3/60 may be networked with and use the software of the Sun-2 and Sun-4 computer families, as well as the other Sun-3 computers. Sun Microsystems. Circle 644.

### *MAb Against T Cell Antigen Receptor*

Identi-T  $\beta$ F1 is a monoclonal antibody specific for a common or nonpolymorphic determinant on the  $\beta$ -chain of the human T cell antigen receptor. The receptor can be recognized in the cytoplasm or on the surface of mature T cells and in the cytoplasm of immature T cells and tumor cells of T lineage. T Cell Sciences. Circle 647.

### *PS/2-Compatible Compact Computer*

The PC Convertible Model 3 is a 5.5-kg computer compatible with the PS/2 family of computers. It has two 3.5-inch disk drives. The backlit liquid-crystal display screen is bright enough to be read without



external light. Static complementary metal oxide semiconductor (CMOS) memory allows the computer to be turned off in the middle of an application and restarted later at the same point. IBM. Circle 628.

### *HPLC Data System with Gradient Control*

ChemResearch is a data management system with gradient control for high-performance liquid chromatography (HPLC) that links a microcomputer with almost any chromatograph. Menu-driven software simplifies the setup of gradient and analysis methods. Dual-pump gradient control can

be configured for most HPLC pumps that have voltage or frequency control inputs. Standard features include data acquisition from one or two detectors with sampling rates from 0.1 to 20 points per second, real-time graphics display and printout of chromatograms, peak detection output to control a fraction collector, and ability to reprocess and compare stored chromatograms. Isco. Circle 655.

### *Water Polisher*

Picopure is a point-of-use water system that removes microorganisms, pyrogens, and other particulates from deionized or distilled water. An asymmetric 100,000-molecular weight polysulfone ultrafiltration cartridge provides complete flow-through without the need for blow-by and recirculation of contaminants back into the water system. High-intensity ultraviolet light kills microorganisms as the water leaves the draw-off spout. The system has ultrafilter disinfection ports. Hydro Service and Supplies. Circle 651.

### *Literature*

*Standard* is a newsletter about fermentation and cell-culture reactors and instruments. LH Fermentation. Circle 638.

*Digital Signal Processing* describes the benefits and ramifications of processing acquired waveforms digitally instead of analogically. LeCroy. Circle 642.

*BioTrack* is a quarterly newsletter of biotechnology-related articles and product descriptions. Fisher Scientific, Biotechnology Group. Circle 656.

*Enzyme Substrates, Biologically-Active Peptides, Amino Acid Derivatives, and Synthesis Reagents* is a 40-page catalog of research peptides and biochemicals. Vega Biotechnologies. Circle 657.

*DU Series 60: Bulletin 7780* describes a line of ultraviolet-visible light scanning spectrophotometers. Beckman Instruments, Scientific Instruments Division. Circle 658.

*Enzyme Conjugates* is a product brochure about 150 enzyme-conjugated antisera to 16 animal species. Organon Teknika, Cappel. Circle 659.

*Products for the Modern Alchemist* is a catalog containing a stopwatch that prints hard-copy records, a calculator that computes and formulates reagent solutions, a combination index-card and microscope-slide holder, a zero-contamination wash bottle, and other timers, controllers, thermometers, and clocks. Fisher Scientific. Circle 661.

# Personnel Placement

**SCIENCE** publishes each Friday, except the last Friday of the year. Advertising is accepted only in writing; no abbreviations. Any deadline in ad must be at least 2 weeks after date of issue in which ad appears. Also, personnel advertising is accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap, or sexual preference.

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Thursday, 10 a.m., 2 weeks prior to issue date (mailed on issue date).

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

## LINE CLASSIFIED (POSITIONS OPEN, COURSES, FELLOWSHIPS, MARKETPLACE, and so forth):

\$35.00 per line, \$350 minimum, per week (minimum charge covers one inch on a single column; one inch equals 10 lines of 52 characters and spaces per line). No charge for use of box number. No agency commission for ads less than 4 inches. No cash discount. Prepayment required for all foreign ads. Purchase orders and/or cover letter including billing address required for all other advertising.

## To ESTIMATE ad cost:

Structure ad copy on a separate page, on lines of 52 characters and spaces. Include any desired heading. Each line of heading, and/or extra line spaces, and all partial lines (including centered reply information) are counted as full lines. Ad titles located within the text are printed in boldface caps and are only 32 characters per line. In ESTIMATING the cost, multiply total lines  $\times$  \$35.00 = approximate cost of ad. (This is an approximate cost ONLY. Allow for variation between estimated lines and actual typeset lines and the resulting final cost. Purchase orders must allow for some degree of flexibility and/or adjustment.)

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

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**SCIENCE**  
1333 H Street, NW  
Washington, DC 20005

## POSITIONS WANTED

**American Biochemist, M.S.** Eight years of research experience in neuropharmacology, enzymology, and dermal anatomy and physiology. Experienced with TLC, HPLC, PC, electrophoresis, tissue culture and animal surgery. Seeking overseas research or teaching position in Mid-East. Box 125, SCIENCE.

**B.Sc. (U.S.)/LL.B. (Australia).** Background in nuclear medicine; supervisory and administrative experience; 5 years of personal injuries litigation. Seeking government or private sector position in science policy, particularly as applying to Pacific region. Thomas Johnson, 415 East Main Street, Danville, KY 40422. 606-236-1413.

**Biochemist/Cell Biologist, Ph.D., 1980.** Experienced in cell culture techniques, purification and characterization, or proteins and enzymes. Enzymology, protein chemistry, protein sequencing, HPLC, TLC, EIA, RIA. Folate and pteridine biochemistry. Drug inhibition screening and resistance. Cloning, lymphocyte works, and so forth. Seeks research position. Box 118, SCIENCE.

## POSITIONS WANTED

**Biochemist, Ph.D.** Extensive research expertise in enzymology, protein chemistry, drug metabolism, biochemical toxicology, immunology, isotopes, animal studies, column chromatography, GC, HPLC. Seeks research position. 4414 Douglas Street, Omaha, NE 68131.

**Ph.D. Cellular Biology (Immunology/Molecular Biology).** Background includes: corporate level technology assessment/transfer, DNA probe diagnostic assay development, management of new product development and laboratory projects, biotechnology market research, technical trouble shooting (cell culture and immunodiagnosics), international biotechnical liaison work. Desires management position in industry, government or an appropriate academic position. Box 128, SCIENCE.

**D.V.M., Ph.D., Diplomate in Toxicology and Pathology.** Seeking senior position in academia, government, industry, research, or other suitable institution. Interested in investigating pathobiologic, including biochemical, mechanisms; experienced in comparative pathology; published innovative research. Will teach and do administrative work as desired. Box 114, SCIENCE.

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

**Hybridoma Specialist, B.S.** Seven years of experience (academia and industry) in monoclonal antibody technologies, tissue culture, antibody characterization, purification, cloning, ascites production, RIA, ELISA, fluorescence assays, cell surface marker analysis (FACS, Spectrum), chemical conjugations, HPLC, ion exchange chromatography, SDS-PAGE, radio-iodination. Proven troubleshooter. Excellent communication skills. Numerous publications. Seeks challenging position. Box 126, SCIENCE.

**Industrial Microbiologist, Ph.D., 1984.** Experience in ethanol fermentation, cell immobilization, plasmid vector construction, yeast strain development using protoplast fusion, recombinant DNA technique, hybridization. Available immediately. Box 127, SCIENCE.

**Neurophysiologist (Ph.D. 1982)** with a broad neuroscience background. Expertise in unit/evoled potential recording in behaving animal. Extensive computer programming and image processing experience. Good publication record. Seeks academic or industrial position. Box 131, SCIENCE.

## POSITIONS OPEN

### ANATOMISTS

The University of California, San Francisco, School of Dentistry invites applications for two faculty positions at the assistant or associate professor level (in Residence and Adjunct series). Applicants must have M.D., Ph.D., D.M.D., D.D.S. or B.D.S., and demonstrated experience in teaching both human gross anatomy and neuroanatomy, as well as a strong research program. Please submit curriculum vitae and three letters of recommendation before 31 October 1987, to: **Dr. Susan Fisher, Division of Oral Biology, HSW 604, University of California, San Francisco, CA 94143-0512.** *The University of California is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

**ASSISTANT PROFESSOR OF BIOCHEMISTRY—UNIVERSITY OF WASHINGTON.** Applicants for this tenure-track position should have demonstrated the ability to develop a strong and creative research program in modern biochemistry, including aspects of cell, developmental, and neurobiology. Candidates should be interested in and capable of teaching biochemistry at the undergraduate and graduate levels. Submit curriculum vitae, representative papers, a succinct statement of research interests, and have three letters of recommendation sent to: **Search Committee, Department of Biochemistry, University of Washington, Seattle, WA 98195.** Application deadline: 30 November 1987. *The University of Washington is committed to Equal Opportunity through Affirmative Action in Employment, and we are especially eager to identify women and minority persons with appropriate qualifications.*

## POSITIONS OPEN

**ASSISTANT PROFESSOR.** The Astronomy Program of the University of Maryland is joining with the Universities of California (Berkeley) and of Illinois (Urbana) to expand and operate the millimeter-wave array at Hat Creek, California. As part of this collaboration, we expect to expand our faculty and staff in this area. We are seeking a person whose major research effort would involve work with the array. We would prefer to hire a person at the assistant professor level, but will consider applicants at other levels. Send curriculum vitae to: **Dr. Roger A. Bell, Director, Astronomy Program, University of Maryland, College Park, MD 20742.** Applications received prior to 31 December 1987 will be given full consideration. *The University of Maryland is an Affirmative Action Employer.*

The James A. Baker Institute for Animal Health, a unit of the Department of Microbiology, Immunology and Parasitology in the New York State College of Veterinary Medicine at Cornell, seeks candidates for a tenure-track position at the **ASSISTANT PROFESSOR** level. Candidates are expected to have a D.V.M. or equivalent and/or Ph.D. with training in molecular and cellular biology. Two years of postdoctoral training are preferred. The candidate should have demonstrated potential for independent research. Support for technical assistance and initial operations would be provided, but the individual would be expected to develop a competitively funded research program within two years of appointment. Although the position involves a primary commitment to research, teaching at the graduate and professional level is expected. The Baker Institute presently consists of seven faculty members. All have independent, well funded research programs. The Institute has well equipped laboratories, excellent animal facilities, and additional laboratory space is now under construction. Send résumé to: **Dr. D. D. McGregor, Director, James A. Baker Institute for Animal Health, New York State College of Veterinary Medicine, Cornell University, Ithaca, NY 14853-6401.**

*Cornell University is an Affirmative Action/Equal Opportunity Employer/Educator.*

### ASSISTANT PROFESSOR OF BIOCHEMISTRY

Applications are invited for a tenure-track position at the level of assistant professor to begin 1 July 1988. Candidates should have a commitment to teaching and the ability to develop and maintain a vigorous and creative research program in biochemistry, molecular biology, or biophysics. Potential for collaboration exists with scientists of this and other departments of the medical school in a research environment that includes the Oregon Regional Primate Research Center, the Portland Shriners Hospital Research Unit, and the new Vollum Institute for Advanced Biomedical Research. Applicants should send curriculum vitae, bibliography, reprints of representative papers, a summary of career goals and research plans, and names of three references to: **Richard T. Jones, Chairman of Biochemistry, School of Medicine, L224, Oregon Health Sciences University (OHSU), 3181 Southwest Sam Jackson Park Road, Portland, OR 97201.** All applications received by 1 October 1987, will be considered. *Women and minority candidates are especially invited to apply. OHSU is an Equal Opportunity/Affirmative Action Employer.*

**ASSISTANT PROFESSOR IN BIOCHEMISTRY.** Candidates with at least 2 years of postdoctoral research experience in protein synthesis, enzymology, and protein structure, or membrane biochemistry are preferred. Applicants will be expected to conduct an active research program, obtain extramural funding, and participate in teaching medical and graduate students. Send curriculum vitae, outlines of research projections to: **Professor I. Danishefsky, Chairman, Biochemistry Department, New York Medical College, Valhalla, NY 10595.**

*Equal Opportunity/Affirmative Action Employer*

**ASSISTANT PROFESSOR, CELL BIOLOGY.** Available spring, 1988. Ph.D. required. Teach cell biology, developmental biology, embryology, histology; direct graduate students; maintain active research program; demonstrate ability to secure extramural funding. Curriculum vitae, statement of research goals, three letters of recommendation must be received by 1 December, 1987. Send to: **Dr. Gary W. Childers, Department of Biological Sciences, Box 814, Southeastern Louisiana University, Hammond, LA 70402.** *An Equal Opportunity Employer.*

## POSITIONS OPEN

Yale University—The Department of Chemistry invites applications for two positions at the **ASSISTANT PROFESSOR** level, effective academic year 1988. We seek bright teacher-scholars who show promise for developing outstanding research programs in organic chemistry, and in experimental and theoretical physical chemistry.

Applicants should send curriculum vitae, a statement of research interests and plans, and should arrange for the submission of three letters of recommendation. All materials should be received by 31 October 1987. Send applications to: **Professor Kenneth B. Wiberg, Chairman, Faculty Search Committee, Department of Chemistry, Yale University, 225 Prospect Street, P.O. Box 6666, New Haven, CT 06511-8118. Yale University is an Equal Opportunity/Affirmative Action Employer.**

**ASSISTANT/ASSOCIATE PROFESSORS—MICROBIOLOGY.** The Department of Microbiology at the University of Vermont is seeking to expand its research base in molecular genetics. To do this, a significant number of tenure-track faculty will be recruited. The Department will be housed in a new Microbiology Center. Faculty members will have appointments in both the College of Medicine and the College of Agriculture and Life Sciences. Departmental teaching responsibilities are to undergraduate, graduate and medical students. Applications will be accepted until 30 November 1987, or until satisfactory candidates are selected. Strong applicants should send their curriculum vitae, present and future research plans, and the names and addresses of at least three references to: **Dr. Susan S. Wallace, Professor and Chairperson, Department of Microbiology, University of Vermont, Burlington, VT 05405.**

*An Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

**ASSISTANT PROFESSOR—PHARMACOLOGY/TOXICOLOGY.** Tenure-track positions are open at the level of assistant professor for outstanding investigators interested in basic pharmacological research and teaching. Preference will be given to the following individuals: **Cardiovascular pharmacologists** interested in (i) drug actions at the tissue/cellular level, or (ii) ionic channel function and regulation in cardiac/smooth muscle cells (experience with patch clamp techniques for whole-cell and single-channel recording); **Neuropharmacologists** capable of utilizing modern techniques of molecular biology and biochemistry (e.g., to study receptor-second messenger systems, neuropeptides). Applicants should send curriculum vitae, a statement of research plans, and three letters of reference to: **K. E. Moore, Ph.D., Chairman, Department of Pharmacology and Toxicology, Michigan State University, East Lansing, MI 48824. An Equal Opportunity/Affirmative Action Employer.**

### ASSISTANT PROFESSOR OF TOXICOLOGY

The Department of Environmental and Community Medicine of the University of Medicine and Dentistry of New Jersey (UMDNJ)—Robert Wood Johnson Medical School is continuing to expand its Division of Toxicology. The research efforts of the Division, which co-sponsors the Graduate Program in Toxicology, and the Graduate Program in Public Health, with Rutgers University, are directed toward the study of mechanisms of toxicity of several classes of xenobiotics, and the molecular biology of skin, liver, and bone marrow diseases. Applicants should possess a doctorate level degree and appropriate postdoctoral training to be successful in attaining NIH supported research of pertinence to the mission of the program. The successful candidate will participate in the team teaching efforts of the Division, as well as have the opportunity to interact with established researchers in clinical toxicology, epidemiology, and exposure assessment. UMDNJ and Rutgers University have received funding to develop the Environmental and Occupational Health Sciences Institute. This institute will be the focus for much of the Toxicology and Environmental Health Research in New Jersey with research funded by federal, state, and private agencies. The appointment will be supported throughout the assistant professorship period. Candidates can send curriculum vitae and the names of three references to: **Dr. Michael A. Gallo, Department of Environmental and Community Medicine, UMDNJ—Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854-5635. Equal Opportunity/Affirmative Action Employer. M/F/H/V.**

## POSITIONS OPEN

### ASSISTANT OR ASSOCIATE PROFESSOR OF ANATOMY

Applications are invited for tenure-track positions at the assistant or associate professor level. Applicants at the assistant professor level should have a Ph.D. or equivalent, postdoctoral experience, an active research program with a high potential for attracting external support, and promise of ability as a teacher of gross anatomy and/or histology. Applicants at the associate professor level should have an ongoing externally funded research program, an established record in scholarship supported by substantial publications, experience in teaching gross anatomy and/or histology, and a record of successful direction of doctoral candidates or fellows. Specific research areas are open, although preference will be given to cell and molecular biology.

Send curriculum vitae, bibliography, a brief statement of research and teaching experience, plus names of three references to: **Chairman, Anatomy Faculty Search Committee, The University of Iowa College of Medicine, Iowa City, IA 52242.**

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

### ASSISTANT/ASSOCIATE PROFESSOR OF LIMNOLOGY

Tennessee Technological University is seeking a highly qualified person to fill a newly created academic position in the Center for the Management, Utilization and Protection of Water Resources and Department of Biology. The position is a 9-month tenure-track position at the assistant/associate professor level, and available immediately. An individual is sought who is interested in developing an excellent research program in limnology. The individual will be expected to teach a limited number of graduate and undergraduate courses related to limnology. Candidates should hold the Ph.D. degree. Salary will be commensurate with qualifications and experience of applicant. Interested persons should send complete résumé with names, addresses, and telephone numbers of four references to:

**Dr. Dennis B. George, Chairman  
Limnologist Search Committee  
Tennessee Technological University  
Box 5082  
Cookeville, TN 38505**

The review of applicants' résumés will begin on 1 October 1987. Résumés for the limnologist position will be accepted until position is filled. *Tennessee Technological University is an Affirmative Action/Equal Opportunity Employer.*

### ASSISTANT/ASSOCIATE PROFESSORSHIPS IN NEUROBIOLOGY

The Department of Anatomy and Cell Biology, Georgetown University School of Medicine is currently seeking applications for two tenure-track positions for neurobiologists at either the assistant or associate professor level. Applicants must have a Ph.D. degree, at least 2 years of postdoctoral experience, and have demonstrated the ability to conduct independent research. Preference will be given to applicants with research interests in vertebrate neurodevelopment, regeneration, or aging of the nervous system. Candidates with a strong background in molecular biology are encouraged to apply. Teaching involves participation in a team-taught medical neurobiology course. Application deadline 15 October 1987. Send curriculum vitae, description of research interests, and the names of three references to: **Dr. Lawrence F. Kromer, Department of Anatomy and Cell Biology, Georgetown University, School of Medicine, 3900 Reservoir Road, NW, Washington, DC 20007.**

**ASSISTANT OR ASSOCIATE PROFESSOR IN THE RESEARCH ASSOCIATE TRACK** to assume major scientific and administrative responsibility in a cellular electrophysiology laboratory studying arrhythmogenesis and the actions of antiarrhythmic drugs. Experience in single cell work, voltage clamping, ion sensitive microelectrodes, and computer programming preferable. Excellent scientific environment. Renewable term appointment with full fringe benefits. Immediate availability. Please send curriculum vitae, representative reprints, and names of three references to: **Morton F. Arnsdorf, M.D., Chief, Section of Cardiology, University of Chicago Hospitals, Box 423, 5841 South Maryland, Chicago, IL 60637.**

## POSITIONS OPEN

### ASSISTANT OR ASSOCIATE PROFESSOR

The interdepartmental and multidisciplinary Reproductive Sciences and Endocrinology Laboratories of the University of Miami School of Medicine invite applications and nominations for a tenure-track position at the level of assistant or associate professor. Candidates must have expertise in the application of molecular genetics to some aspect of molecular and cellular reproductive biology/endocrinology, or developmental biology. The primary departmental appointment will depend upon the interests and background of the candidate and can be in either biochemistry, cell biology, medicine, ob/gyn, or oncology. Responsibilities include development of a strong independent research program and participation in the teaching program, including an interdepartmental training program. Applicants should submit curriculum vitae, with a summary of research interests, and request that three reference letters be mailed to: **Dr. J. David Puett, REPCEND Labs (D-5), University of Miami School of Medicine, P.O. Box 016960, Miami, FL 33101. An Equal Opportunity/Affirmative Action Employer.**

### ASSISTANT/ASSOCIATE PROFESSOR NEUTRON MEDICAL PHYSICIST DEPARTMENT OF RADIATION MEDICINE UNIVERSITY OF KENTUCKY MEDICAL CENTER

Radiation Cancer Center with active Cf-252 neutron brachytherapy of cervix, female organs, brain, and interstitial. Patient care responsibilities for all neutron and gamma brachytherapy procedures. Participation in research training, medical physics education program expected. Appointment carries academic title at appropriate level to qualifications. Must be able to carry out neutron measurements and understand physics, dosimetry and microdosimetry. We are funded to carry out research and support for research programs is expected. Candidate will also assist in curator and safety activities for brachytherapy procedures.

Ph.D. needed. Remote afterloading equipment design and engineering desirable. Salary based on experience and qualifications. Curriculum vitae, bibliography, and names of at least three references needed.

Nominations and applications should be sent to: **Yosh Maruyama, M.D., Chairman, Radiation Medicine Department, University of Kentucky Medical Center, Room C15, 800 Rose Street, Lexington, KY 40536. The University of Kentucky is an Equal Opportunity/Affirmative Action Employer.**

**ASSISTANT RESEARCH SCIENTIST** position in neuropharmacology to study the effects of organophosphorus agents on spinal cord function available 1 October 1987. Applicant should be experienced in electrophysiological techniques and have knowledge of spinal cord function. Send curriculum vitae and the names of three references to: **Dr. Barry D. Goldstein, Department of Pharmacology and Toxicology, Medical College of Georgia, Augusta, GA 30912-3368. Equal Opportunity Employer/Affirmative Action Program.**

### BASIC NEUROSCIENTIST

The Ohio State University College of Medicine seeks applications for a tenure-track position at the assistant or associate professor level in our expanding interdisciplinary neuroscience program. The position requires research expertise in cellular-molecular biology of neurons or biophysics of excitable or receptor-mediated membrane functions. The successful applicant will be expected to maintain a nationally competitive research program, and to participate in the development of educational programs in neuroscience. Candidates should have an M.D., Ph.D., or equivalent, and a minimum of 2 years of postdoctoral training. Preference will be given to candidates with funded research in progress. Substantial start-up funds are available. A tenure-track appointment will be in the Department of Anatomy, Pharmacology, Physiology or Physiological Chemistry depending upon the area of competence of the appointee.

Please submit curriculum vitae, statement of current research interests, and three to five letters of reference to: **Dr. James S. King, Neuroscience Program, Department of Anatomy, 4066 Graves Hall, The Ohio State University, Columbus, OH 43210 by 30 October 1987.**

*Equal Opportunity/Affirmative Action Employer.*



## POSITIONS OPEN

Position opening for an ASSISTANT RESEARCH BIOLOGIST, Step 1 to work in a protein crystallography group. Must have Ph.D. in biology, chemistry, or physics, and at least 3 years of postdoctoral experience in protein crystallography. Must have good knowledge of the multiwire area detector diffractometer, Fortran language and of the general macromolecule crystallography computing package. Salary will be based on qualifications and the University of California pay scale. Send résumé, including addresses of three references by 25 September 1987 to: **Dr. Nguyen-Huu Xuong, Department of Physics, B-019, University of California, San Diego, La Jolla, CA 92093.**

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

### BIOCHEMIST

A tenure-track position for a modern biochemist at the assistant professor level in ACS-accredited Chemistry Department beginning fall, 1988. Ph.D. in biochemistry and an undergraduate major in chemistry or course-work equivalent are required; 1 to 2 years of postdoctoral experience preferred, but not required. A strong commitment to teaching and research at both the undergraduate and graduate (M.S.) level is expected. The filling of this position is contingent upon funding. Submit curriculum vitae and research program, and have three letters of reference and transcripts sent before 31 December 1987 to: **Search Committee, Chemistry Department, Western Illinois University, Macomb, IL 61455. Equal Opportunity/Affirmative Action Employer.**

**CELLULAR NEUROBIOLOGISTS AND DEVELOPMENTAL BIOLOGISTS.** The Department of Biological Sciences, Stanford University, has several openings for tenure-track faculty positions in the areas of cellular neurobiology and/or developmental biology. Applications at the assistant professor level are preferred, but the Department will also consider appropriate candidates at a more senior level for one of these positions. Applicants should send their curriculum vitae, a statement of research accomplishments and anticipated research directions, and the names of three appropriate references to: **Chairperson, Neurobiology Search Committee, Department of Biological Sciences, Stanford, CA 94305-5020. Applications from women and minority candidates are especially welcome. Stanford University is an Equal Opportunity Employer.**

### UNIVERSITY OF CALIFORNIA, DAVIS DEPARTMENT OF POMOLOGY ANNOUNCES

#### THE WILL W. LESTER ENDOWED CHAIR IN POMOLOGY

Applications are now invited for the Will W. Lester Endowed Chair in Pomology. Applicants should have made outstanding scholarly contributions in fields that include or are pertinent to pomology. This could include related disciplines such as plant physiology, plant biochemistry, plant pathology, plant molecular biology, or plant breeding and genetics. The successful applicant will be expected to develop an active research program, to direct and advise graduate students and postdoctorals, and to secure competitive grants. Applicants should have an interest in teaching undergraduate and graduate courses related to their area of expertise. The formal appointment will be a permanent position as a tenured faculty member of the Department of Pomology at the full professorial level. Applications should be submitted in letter form describing research and teaching interests and background, together with curriculum vitae, a list of publications, and the names of three referees, by 1 October 1987, to: **Dr. Adel Kader, Chair, Department of Pomology, University of California, Davis, CA 95616. In conformance with applicable law and University policy, the University of California is an Equal Opportunity/Affirmative Action Employer.**

### CHAIRPERSON, DEPARTMENT OF BOTANY

The University of Florida invites nominations of, or applications from, outstanding scholars to lead this department of fourteen members. Applications must be received by 23 October 1987, and should include curriculum vitae and names, addresses, and telephone numbers of five referees. Send to: **John J. Ewel, Chair of the Search Committee, Department of Botany, University of Florida, Gainesville, FL 32611.**

*An Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### CHAIRMAN, DEPARTMENT OF PHYSIOLOGY AND BIOPHYSICS

The College of Medicine, University of Tennessee, Memphis, requests applications for the position of Professor and Chairman of its Department of Physiology and Biophysics. The department is composed of a distinguished faculty whose members have active, well-funded research programs. It is located on the campus of one of the nation's largest health science centers. Applicants should hold the Ph.D. and/or M.D. degree or equivalent, be distinguished investigators, have strong credentials in the educational arena and be capable of providing vigorous academic leadership for this major basic science department. Candidates are requested to submit curriculum vitae and names and addresses of three references no later than 1 December 1987, to: **Murray Heimberg, Ph.D., M.D., Chairman, Physiology and Biophysics Advisory Committee, The University of Tennessee, Memphis, College of Medicine, 800 Madison Avenue, Memphis, TN 38163.**

*As an Equal Opportunity Employer, The University of Tennessee, Memphis is committed to an aggressive Affirmative Action effort, and encourages minority applications.*

### CHAIRPERSON, DEPARTMENT OF PHYSIOLOGY UNIVERSITY OF COLORADO SCHOOL OF MEDICINE

The University of Colorado invites applications and nominations for the position of Chairperson, Department of Physiology. Individuals in all areas of physiology are encouraged to apply. Department interests are currently in neuroscience, membrane function, fetal-placental and cardio-respiratory physiology. Applicants should include curriculum vitae, letter of interest, names of three references and mail by 1 November 1987 to: **Dr. R. A. Deitrich, Department of Pharmacology, University of Colorado Health Sciences Center, 4200 East 9th Avenue, Denver, CO 80262. Telephone: 303-270-7076. Women and minority applicants are encouraged to apply. The University of Colorado is an Affirmative Action/Equal Opportunity Employer.**

### CHAIRPERSON DEPARTMENT OF MEDICINAL CHEMISTRY UNIVERSITY OF UTAH

The College of Pharmacy, University of Utah, invites applications and nominations for the position of Chairperson for the Department of Medicinal Chemistry. Candidates must have a strong research program, with demonstrated leadership and administrative abilities, and a strong commitment to graduate and professional education. The Chairperson will have the opportunity to recruit new faculty, and to play a major role in the continuing development of a research-oriented department with interests in structure and chemistry of biological molecules, natural products and bioorganic chemistry, and biological mechanisms.

Applicants should send curriculum vitae and names of three references, by 31 October 1987, or until a suitable candidate is identified, to: **Dr. James A. McCloskey, Chairman, Search Committee, Department of Medicinal Chemistry, Skaggs Hall, University of Utah, Salt Lake City, UT 84112. An Affirmative Action/Equal Opportunity Employer.**

### CHAIRPERSON— MICROBIOLOGY/IMMUNOLOGY

The Loma Linda University, School of Medicine, invites applications and nominations for the position of Chairperson of the Department of Microbiology and Immunology.

A candidate should have either an M.D. or Ph.D. degree or both and have demonstrated leadership and productivity in teaching and research. Experience in academic administration is desirable. Loma Linda University is a private institution where education is conducted within a Christian environment. *The University is a religiously qualified, Equal Opportunity Employer.*

Nominations and applications should be sent to: **B. Lyn Behrens, Dean of School of Medicine, Loma Linda University, Loma Linda, CA 92350.** Applications should include curriculum vitae and the names of three references. Closing date for applications is 30 November 1987.

## POSITIONS OPEN

### CHAIRPERSON DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY

The State University of New York Health Science Center at Syracuse, College of Medicine, a center for research, professional education, and patient care, invites applications and nominations for the position of Professor and Chairperson in the Department of Microbiology and Immunology. Candidates must have an M.D., Ph.D., or equivalent degree, a devotion to education, a distinguished record of scholarly and professional achievement, proven leadership and administrative ability and a vigorous research program. A highly competitive salary and generous fringe benefits are offered. Send nominations or letters of application (with curriculum vitae, summary of experience and three letters of reference) to:

**Dr. Charles R. Ross, Chairperson  
Search Committee  
Department of Pharmacology  
SUNY Health Science Center at Syracuse  
750 East Adams Street  
Syracuse, NY 13210**

*An Equal Opportunity/Affirmative Action Employer.*

### COMPUTER SYSTEM SUPERVISOR, AGRICULTURAL BIOTECH RESEARCH UNIT

Responsible for operation of Agricultural Biotech Research Unit (ABRU) end user computers. Installs new software releases, works with vendors to correct hardware/software issues, develops special software systems to facilitate end user usage, answers user's questions about computer, designs and organizes the development of new applications specific to ABRU. Consults with scientists to determine programs/applications needed for research purposes. Provides recommendation on feasibility and prioritization of programming projects. Tests and debugs programs. Trains end users for system and specific programs and holds periodic training classes. Has overall responsibility, and is "on call" for any security and system failure. Supervises one programmer/operator. Prepares budget for computer operations within unit.

Must possess B.S. in biochemistry and 2 years of experience in the job or 2 years of experience in computer programming/scientific applications. Must have 2 years of experience with VAX/VMS system. The 2 years of experience required must include computer operations, basic troubleshooting and system configuration experience. Forty hours per week, \$35,672 per year, JO#NC7100482 DOT Code 169.167-030.

Apply to: **Job Service, 516 North Mangum Street, Durham, NC 27701** or nearest Job Service office.

**CYTOGENETICS.** Clinical/research opportunities in human cytogenetics. Interests include chorion villus sampling, high-resolution cytogenetics, fragile X, molecular basis of cytogenetic disorders, in situ hybridization and human gene mapping. Positions available include: (1) **RESEARCH ASSISTANT**—requires B.S. or M.S. and experience in human cytogenetics, (2) **POSTDOCTORAL FELLOWSHIP**—requires Ph.D. with strong background in either human cytogenetics or molecular biology, ABMG certification available. Send curriculum vitae to: **Dr. David Ledbetter, Institute for Molecular Genetics, Baylor College of Medicine, Houston, TX 77030.**

**DIRECT MARKETING STATISTICIAN.** To analyze marketing data from approximately 200,000 pieces of junk mail/month utilizing statistical methodology and modern combinational probability/statistical sampling techniques. Project anticipated profits from future mailings, margins of error, advise Marketing Director on which junk mail packages and which price level maximizes return on investments; what mailing lists to use; and design sampling/test techniques for copy, price and mailing lists as a function of size of list and anticipated average order. Requirements: Master's in applied statistics or biostatistics, plus 1 year of experience as applied statistician. Must be able to demonstrate proficiency in programming language and in at least one of the following: SAS, APL or SPSS. Salary: \$2,142 per month. Job Site: Lafayette, California. Send this ad and a résumé to **Job #DC-6004, P.O. Box 9560, Sacramento, CA 95823-0560** no later than 19 September 1987.

## POSITIONS OPEN

**DEAN OF THE COLLEGE OF MEDICINE,** University of South Florida. The University of South Florida is inviting applications and nominations for the position of Dean of the College of Medicine. The college is affiliated with the H. Lee Moffitt Cancer Center and Research Institute, a Shriners pediatric orthopedic hospital, psychiatric hospital (all on campus), and two Veterans Administration Hospitals, the Tampa General Hospital and All Children's Hospital, St. Petersburg. The Dean is the chief executive officer of the college. Responsibilities include leadership in academic policies and program development, development and maintenance of quality educational, clinical and research programs. Initiation and administration of budgets for education, research, clinical and faculty matters are required. This position requires a strong background in academic leadership, medical education and research, as well as some familiarity with medical center or university hospital administration. Qualified candidates must have an M.D. or M.D./Ph.D. degree. Nominations and applications received or postmarked by 31 October 1987 will receive consideration. Recruiting will continue until the position is filled. Applications should include a letter summarizing the candidate's experience, a complete curriculum vitae and names and addresses of three references. Please send all correspondence to: **H. Juergen Nord, M.D., Chairman, Search Committee, University of South Florida College of Medicine, 12901 Bruce B. Downs Boulevard, MDC Box 2, Tampa, FL 33612-4799. The University of South Florida is an Affirmative Action/Equal Opportunity Institution.**

### DIRECTOR OF THE KELLOGG BIOLOGICAL STATION

Michigan State University seeks a resident director of the Kellogg Biological Station (KBS). The responsibility of the director is to provide creative leadership and to guide future development of KBS programs in ecology, natural resources, and agriculture. The University is committed to build at the Station a program of excellence in research, education and extension directed toward the comprehensive understanding of the inter-dependence of natural and managed terrestrial and aquatic systems and the conservation of natural resources.

The Station has ten resident faculty, a \$4-million annual budget, 2300 acres, new research and teaching facilities and cooperates with campus based faculty programs of mutual interest.

Candidates should have an established record of scholarly activity, which includes research experience, have demonstrated leadership ability and possess a strong interest in interdisciplinary research and teaching.

Send letter of application and vitae to:

**Dr. Arnold Revzin**  
College of Natural Science  
103 Natural Science Building  
Michigan State University  
East Lansing, MI 48824  
Telephone: 517-355-4472

Closing date for applications is 1 November 1987, or until a suitable candidate is identified.

### DIRECTOR NATIONAL MUSEUM OF NATURAL HISTORY

The Smithsonian Institution invites applications for the position of Director, National Museum of Natural History, Washington, D.C. The Museum is responsible for the acquisition, curation, and preservation of collections of objects of natural history, archaeology, and ethnology. As an international research center, the Museum conducts basic research in the natural sciences and on the origins and development of man. The Museum also develops and presents exhibits for public viewing which display the variety of life forms and cultural systems that have developed throughout the world, as well as public programs which serve to provide a contextual placement. Candidates should have a high degree of scholarly attainment and recognition in a field of natural science or anthropology; breadth of scientific knowledge and understanding; familiarity with academic and research institutions; and leadership ability. Interested applicants should submit a Standard Form 171, Personal Qualifications Statement, and curriculum vitae and bibliography by 16 November 1987 to: **Office of Personnel Administration, Smithsonian Institution, Washington, DC 20560, Attention: MPA-EX-03-87 (S).** Inquiries may be directed to: **Dr. David Challinor, Assistant Secretary for Research, 202-357-2939. An Equal Opportunity Employer.**

## Medicinal Chemist

The Medicinal Chemistry Department of Smith Kline & French Laboratories seeks an outstanding organic chemist to work in a state-of-the-art research facility in the Philadelphia suburbs, near Valley Forge. The selected individual will assist in the design and synthesis of receptor antagonists and molecules destined to interrupt enzymatic processes. Experience in synthetic organic chemistry is essential.

The successful candidate will possess the following:

- B.S. or M.S. in Chemistry or equivalent experience.
- Excellent working knowledge of reaction mechanisms.
- Skill in modern methods of isolation and purification of reaction products.
- Experience in the use of modern physical methods to determine the structure of reaction products.
- An ability to communicate results effectively.

We offer an excellent compensation, benefits and relocation package as well as the opportunity for personal and professional growth. For confidential consideration, send your C.V. and names of three references to **Mr. Robert F. Obst, R0090, R&D Senior Employment Consultant, SmithKline Beckman Corporation, P.O. Box 1539, King of Prussia, PA 19406-0939.** We are an Equal Opportunity Employer, M/F/H/V.

**SK&F**  
A SmithKline Beckman Company

## POSTDOCTORAL POSITION

The Salk Institute is seeking a creative, motivated, and research-oriented individual to do in vivo studies dealing with physiological and pharmacological regulation of pituitary function (including effect of stress, alcohol, etc.). Requires a Ph.D. in biology, endocrinology, or physiology.

Please send curriculum vitae and three letters of reference to:

Department JT  
**The Salk Institute**  
P.O. Box 85800  
San Diego, California 92138

*Equal Opportunity Employer*  
M/F/H/V

## LANSDOWNE CHAIR FACULTY OF ARTS AND SCIENCES UNIVERSITY OF VICTORIA VICTORIA, BRITISH COLUMBIA, CANADA

Applications are invited for a new **Chair** in biological sciences in the field of **Forest Biotechnology and Regeneration**. The successful applicant will be a person of national and international reputation who will enhance and encourage scholarship in one of the following areas of research involving forest trees: molecular biology, tissue culture, physiology or biochemistry. It is the intention to hire four additional faculty members in the above disciplines as part of an expanding research and graduate program offering M.Sc. and Ph.D. degrees in the field of Forest Biotechnology and Regeneration. Based on the field of expertise of the successful candidate, the Chair is tenable in either the Department of Biology or the Department of Biochemistry and Microbiology in the Faculty of Arts and Science.

The University of Victoria has approximately 500 faculty members, 9000 undergraduate students and 1000 graduate students. The Division of Science, within the Faculty of Arts and Science, has over 110 faculty members and offers degrees in Biochemistry, Microbiology, Biology, Chemistry, Computer Science, Mathematics and Physics.

Salary, conditions and benefits to be negotiated, but these will be in line with terms of appointment associated with comparable senior academic positions in the Faculty. Canadian Immigration regulations require the University to assess applications from Canadian citizens and permanent residents of Canada before assessing applications from other persons.

Applications, including full Curriculum Vitae and the names of three referees, will be accepted until **October 31, 1987** and should be submitted to **Dr. Alastair T. Matheson, Dean of Science, Faculty of Arts and Science, University of Victoria, P.O. Box 1700, Victoria, B.C., V8W 2Y2, Canada. Telephone: (604) 721-7061.**

*The University of Victoria offers equal employment opportunities to qualified male and female applicants.*

**UVic**  
UNIVERSITY OF VICTORIA

## POSITIONS OPEN

Washington State University seeks **DIRECTOR, HEALTH RESEARCH AND EDUCATION CENTER (HREC)**, located in Spokane. Appointment effective 1 January 1988. Doctorate (M.D., Ph.D., or Pharm.D.) with at least 5 years of experience in clinical research (preferably in area of clinical pharmacology); associate or full professor rank. Salary open. Complete job description available. Nomination or application letter (including names of at least three references) and curriculum vitae addressed to: **Dr. Robert V. Smith, Chair, HREC Director; Vice Provost for Research and Dean of the Graduate School; Washington State University; Pullman, WA 99164-1030.** Nomination/application deadline: 15 October 1987. *Washington State University is an Equal Opportunity/Affirmative Action Educator and Employer. Protected group members are encouraged to apply and to identify their status.*

### CORNELL UNIVERSITY ELECTROPHYSIOLOGIST

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

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

### ENDOWED CHAIR IN APICULTURE ASSOCIATE PROFESSOR/FULL PROFESSOR Thurber Endowed Chair in Apiculture/Pollinator Ecology

A tenure-track faculty position on annual appointment in research and teaching; Ph.D. in entomology or related field with speciality in apiculture; research and publication record of international scope on pollinator ecology and behavior of honey bees.

Available 1 July 1988. Send application materials by 1 January 1988 including letter of interest, curriculum vitae, description of research/teaching experience, publication reprints and names of five referees. Send to: **E. P. Catts, Chair Entomology, 301 Johnson Hall, Washington State University, Pullman, WA 99164-6432.**

*Washington State University is an Equal Opportunity/Affirmative Action Educator and Employer. Protected group members are encouraged to apply and to identify their status.*

### TEXAS A&M UNIVERSITY DIRECTOR ELECTRON MICROSCOPY CENTER

The Office of University Research at Texas A&M University seeks an individual with demonstrated experience in TEM, SEM, cryotechniques, digital image processing, and x-ray microanalysis. Familiarity with modern techniques in optical, especially fluorescence, microscopy is also important. Current equipment includes a JEOL-25, a JEOL-35CF with EDS and WDS, a Philips 400T with EDS, a Zeiss 10C and a Zeiss SEM-IPS. Plans exist for upgrading Center equipment, and to acquire state-of-the-art image processing capabilities.

In addition to personal competence in using the current instrumentation, the position requires a person with experience in supervising a technical service group and managing a facility. Minimum qualifications are 5 years in a microscopy service function with 2 years as supervisor. This is an established research, service and administrative role, not a faculty tenure-track position.

The successful candidate should be familiar with a broad spectrum of EM techniques and enjoy interaction with scientists from a variety of disciplines. Although samples from both materials and life sciences are processed through the center, experience and expertise in life sciences is preferred.

Send résumé and references to: **Feenan D. Jennings, Executive Director, Office of University Research, Texas A&M University, College Station, TX 77843.**

*Texas A&M University is an Equal Opportunity Employer*

## POSITIONS OPEN

### ENVIRONMENTAL BIOLOGIST

The Board on Environmental Studies and Toxicology of the National Research Council is seeking a senior professional in the area of toxicology, epidemiology, environmental health science, or a closely related biological or biomedical field. This individual will act as project director for a study on Biologic Markers. Duties will include working with a committee of experts, directing a small research staff and providing intellectual overview of the report. A Ph.D., M.D. or equivalent is required with several years in research, teaching, or administration in toxicology, epidemiology, pharmacology, environmental health science, or a closely related science. Must understand the utilization of scientific information in decision making and have the ability to integrate data from a wide variety of disciplines.

Applicants should submit in confidence curriculum vitae and a recent publication or writing sample and names of references to: **NRC/BEST, NAS 358, 2101 Constitution Avenue, NW, Washington, DC 20418.**

*Equal Opportunity Employer.*

### ENVIRONMENTAL HEALTH SCIENTIST

The Board on Environmental Studies and Toxicology of the National Research Council is seeking a professional in the area of ecology, environmental biology, or a closely related biological or biomedical field. This individual will act as project manager for a study on Markers of Pollutant Exposure of Trees and assist with a study on the outer continental shelf. Duties will include working with a committee of experts, providing intellectual overview of the report. A Ph.D., or equivalent is required, with several years in research, teaching, or administration in environmental research, policy, or program work. Must understand the utilization of scientific information in decision making and have the ability to integrate data from a wide variety of disciplines. Applicants should submit in confidence curriculum vitae and a recent publication or writing sample and names of references to: **J. Reisa, NRC/BEST, 2101 Constitution Avenue, NW, Washington, DC 20418.**

*Equal Opportunity Employer.*

### ENVIRONMENTAL POLICY

The new Coastal and Estuarine Policy Program of the University of Maryland seeks a **TENURE-TRACK FACULTY MEMBER** at the Chesapeake Biological Laboratory, a unit of the University's Center for Environmental and Estuarine Studies. The successful applicant should demonstrate experience in obtaining grants relating to issues of public policy in estuarine and coastal waters. The new Coastal and Estuarine Policy Program is interdisciplinary, involving the Law School, the School of Public Affairs, the Center for Environmental and Estuarine Studies and other units of the University of Maryland. This interdisciplinary nature of the program must be reflected in the interests and qualifications of the successful candidate. Rank is open and salary is competitive. Previous postdoctoral experience is preferred.

Please send curriculum vitae, a statement of career and research interests and the names of at least five references to:

**Dr. Kenneth R. Tenore  
Head of Laboratory  
Chesapeake Biological Laboratory  
Solomons, MD 20688-0038**

Applications received before 15 October 1987 will be considered full consideration.

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

## POSITIONS OPEN

**EUKARYOTIC GENETICIST**—A tenure-track position is to be filled at the assistant or associate professor level for September 1988. Duties include teaching an undergraduate course in genetics, one other advanced course per year, and maintaining a vigorous research program including supervision of graduate students. All areas of eukaryotic genetics will be considered including molecular, developmental and evolutionary genetics. Salary commensurate with qualifications and experience. Applicants with postdoctoral experience should send their curriculum vitae and a list of at least three referees to: **Dr. Joseph Kunkel, Chairman, Genetics Search Committee, Zoology Department, University of Massachusetts, Amherst, MA 01003.** Deadline for receipt of application is 30 November 1987. *Affirmative Action/Equal Opportunity Employer.*

### EUKARYOTIC MOLECULAR BIOLOGY FACULTY POSITION

Applications and nominations are invited for a tenure-track faculty position in the Department of Biochemistry, Purdue University, West Lafayette, Indiana. We are particularly interested in individuals trained in molecular biological approaches to human, animal, or animal virus research problems. Candidates must have postdoctoral training, a strong research record, and be capable of developing and continuing a vigorous research program. For consideration, send curriculum vitae, a statement of research interests, and the names and addresses of three references to: **Eukaryotic Molecular Biology Search Committee, Department of Biochemistry, Purdue University, West Lafayette, IN 47907.** Application deadline is 2 October 1987.

*Purdue University is an Equal Opportunity/Affirmative Action Employer.*

### MOLECULAR GENETICIST FACULTY POSITION

The Animal Sciences Department, Purdue University, is seeking an assistant professor (12-month, tenure-track) to conduct research in molecular genetics of domestic animals and teach at the graduate level. Ph.D. and postdoctoral experience in molecular genetics is required. Participation in Purdue's Biochemistry program is expected. Application deadline is 2 October 1987. Send curriculum vitae, reprints, and names and addresses of three references to: **Dr. B. G. Harmon, Head, Department of Animal Sciences, Purdue University, West Lafayette, IN 47907.** *Purdue University is an Affirmative Action/Equal Opportunity Employer.*

### TWO FACULTY APPOINTMENTS DEPARTMENT OF BIOLOGY GEORGIA STATE UNIVERSITY

Applications are invited for two tenure-track assistant professors in the following areas: (i) **MOLECULAR GENETICS**, (ii) **IMMUNOLOGY**. Appointments tentatively starting September 1988 at salaries commensurate with qualifications. Applicants must have demonstrated research potential through postdoctoral experience and research publications. The successful candidates are expected to teach at the undergraduate and doctoral levels, and to develop independent competitively funded research programs. Send curriculum vitae, reprints, a statement of research plans, and three letters of reference to: **Chairman, Department of Biology, Georgia State University, Atlanta, GA 30303.** Deadline for receipt of applications is 15 October 1987. *Georgia State University, unit of the University System of Georgia, is an Equal Opportunity/Affirmative Action Employer.*

The University of Iowa, Department of Internal Medicine invites applicants for a **FACULTY POSITION** in the Division of Cardiovascular Diseases. Minimum requirements include M.D. degree, postgraduate training in clinical medicine, and Ph.D. in human cardiovascular physiology. Candidate must have research experience in exercise physiology, hemodynamic experimental procedures, hypertension and reflex control of the circulation and nerve recording and microneurographic techniques. The applicant will be expected to participate in teaching and clinical activities of the Department of Medicine. Salary is based on the academic level of entry and on the applicant's qualifications and responsibilities. Candidates should submit curriculum vitae to: **Randall Jordison, Assistant to the Chairman, Department of Internal Medicine, SE311 GH, The University of Iowa, Iowa City, IA 52242.** *The University of Iowa is an Equal Opportunity/Affirmative Action Employer.*

## PINELANDS POSTDOCTORAL FELLOWSHIPS

The Division of Pinelands Research (DPR) in the Center for Coastal and Environmental Studies at Rutgers University announces the establishment of 2, two-year **Holstrom Pinelands Postdoctoral Fellowships** to conduct ecological studies in the Pinelands National Reserve. The Division of Pinelands Research carries out basic and applied interdisciplinary ecological research in the Pinelands, a National and Biosphere Reserve. The Pinelands includes the drainage basin of the Mullica River and is thus ecologically related to the Mullica River-Great Bay Estuary.

Areas of inquiry for these fellowships include fire ecology, acid deposition, and wetlands hydrology but applications representing other areas will also be considered. These fellows will work closely with Rutgers faculty and will join 4 DPR postdoctoral fellows working on ecological/environmental problems in the 445,000 hectare Pinelands National Reserve. The Holstrom Fellows will utilize the newly completed NSF-funded research laboratory at the Rutgers Pinelands Field Station.

Interested individuals with the Ph.D. should send curriculum vitae and arrange to send 3 letters of recommendation. Applicants are requested to include a statement of research interests and their relationship to the New Jersey Pinelands (see *BioScience* 34(3):169-173 for background).

Send applications to:

**Ralph E. Good, Director**  
Division of Pinelands Research  
Center for Coastal and Environmental Studies  
Doolittle Hall—Busch Campus  
Rutgers—The State University of New Jersey  
New Brunswick, NJ 08903

*Closing date: 30 September 1987, or until filled. Rutgers—The State University of New Jersey is an Equal Opportunity/Affirmative Action Employer.*

THE STATE UNIVERSITY OF NEW JERSEY  
**RUTGERS**

## DNAX Research Institute

### PROTEIN CHEMIST

DNAX Research Institute has a position immediately available for a Staff Scientist to provide expertise and assistance in protein purification and characterization to various research teams.

Candidates should possess a Ph.D. in chemistry or biochemistry and at least two years' postdoctoral experience in purification of proteins using the latest technology. Demonstrated ability to teach skills to others, to devise suitable protocols, and to function as an effective team member is essential.

DNAX Research Institute, located next to Stanford University, is committed to basic research and provides a unique opportunity for productive collaborative efforts between immunologists and molecular biologists in an academic type of environment.

Interested applicants should send a curriculum vitae and the names of three references to the Human Resources Department, DNAX Research Institute of Molecular and Cellular Biology, 901 California Avenue, Palo Alto, CA 94304-1104. EOE.

## CAREER OPPORTUNITIES AT BECKMAN INSTRUMENTS

Beckman's Diagnostic Systems Group in Southern California, a leader in the clinical diagnostics field, is actively seeking highly motivated professionals for exceptional opportunities in the following areas:

### Manager, Clinical Chemistry Systems

Will manage the development of new Clinical Chemistry Reagents, Calibrators and Controls (liquid and dry) for Clinical Chemistry Systems. Will also manage the development of new instrumentation in conjunction with the engineering and software departments. Requirements include a PhD in Chemistry with over 10 years industrial experience in instrument and reagent development. Excellent leadership and communication skills are required, along with experience managing groups of 10-20 involved in multi-discipline projects.

### Staff Scientist

Will supervise a group of 8-10 chemists and technicians involved in the design, plan, and execution of reagent and instrument studies. You will write test plans and reports, which requires excellent communication skills, both written and verbal. You should have an MS or PhD with over 2 years of professional industrial experience in an analytical/clinical chemistry environment.

### Sr. Scientist

As a member of a small fast-paced team, you will participate in: initiation and planning of new and ongoing enzyme-based product development projects; design and conduct practical analyses to characterize enzymes and related materials; and develop and document novel enzyme assay reagent and control products. You should have an MS or PhD in Analytical and/or Biochemistry with 2-4 years industrial development experience in enzyme/materials characterization and assay development methodology. PC experience highly desirable.

### Sr. Project Scientist

Will manage the development of EIA reagents for manual and automated immunochemistry analyzers. Requirements include a PhD or equivalent in bioanalytical chemistry, with at least 6 years industrial experience in the development and market release of in-vitro diagnostic products. Experience in immunodiagnostic and enzyme immunoassays highly desirable.

### Scientists/Biologists

We have positions at all levels available in Immunochemistry & EIA Development, requiring experience in developing immunoassay reagents and products. Must have current knowledge of immunochemical methods and systems, and/or knowledge of enzymatic and immunochemical assay methods, including enzyme-linked immunoassays. You should have a BS or MS degree in Biochemistry or Immunology with relevant industrial experience. Additionally, we need biologists to design and perform immunoassays for the screening and evaluation of murine monoclonal antibodies. You should have a BS degree in a natural science with at least 2 years experience with RIA's and EIA's.

We offer excellent compensation and benefits packages. Please send resume with salary history to: **Beckman Instruments, Inc., Professional Staffing—SCI/MG, 200 So. Kraemer Blvd., Brea, CA 92621.** An Affirmative Action Employer.

**DIAGNOSTIC SYSTEMS GROUP**

# BECKMAN

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## POSITIONS OPEN

### FACULTY OPENING IN TUMOR IMMUNOLOGY GYNECOLOGIC ONCOLOGY

The Division of Gynecologic Oncology, Department of Obstetrics and Gynecology, UCLA School of Medicine, is actively recruiting basic science faculty in the area of tumor immunology and immunotherapy. The research is in biologic response modifiers for the treatment of gynecologic neoplasms, and the assessment of immunologic function in gynecologic oncology patients.

Qualifications include a Ph.D. who is interested in pursuing this area of immunology and who has an interest in cytokines, the mechanism of lymphoreticular cell activation, and their application to clinical medicine. Our particular interest is in a scientist who has recently completed a postdoctoral fellowship.

Send résumé to:

**Jonathan S. Berek, M.D.**  
Director

Division of Gynecologic Oncology  
Department of Obstetrics and Gynecology  
UCLA School of Medicine  
Room 24-127, CHS  
Los Angeles, CA 90024-1740

*Affirmative Action/Equal Opportunity Employer.*

**FACULTY POSITION.** Medical school department invites applications for tenure-track position at assistant or associate professor level. Applicants must hold a Ph.D. or equivalent degree and have at least 2 years of productive postdoctoral research experience in the areas of cellular and/or molecular immunology. Associate professor candidates must have an established, well-funded research program. Successful candidates will be expected to develop/maintain a vigorous, grant-supported research program in cellular/molecular immunology and participate in the training of medical and graduate students and postdoctoral fellows. Teaching in medical and graduate courses is required. Salary and research start-up support are nationally competitive. Submit curriculum vitae, description of research interests, and names of three references by 30 November 1987 to: **Paul V. Phibbs, Chairman, Department of Microbiology and Immunology, School of Medicine, East Carolina University, Greenville, NC 27858-4354.** *An Equal Opportunity/Affirmative Action Employer. Federal Law requires documentation of identity and employability to be considered for this position.*

**FACULTY POSITION** at assistant/associate professor level in pharmacology, tenure-track, for individual interested in applying molecular biology methodology to the problems of pharmacology. Candidates applying at the assistant professor level should have had at least 2 years of relevant postdoctoral experience. Submit a brief statement of research plans, curriculum vitae, bibliography, and names of three references by 19 October 1987 to: **Dr. H. George Mandel, Department of Pharmacology, George Washington University, Medical Center, 2300 Eye Street, NW, Washington, DC 20037.** *An Equal Opportunity/Affirmative Action Employer.*

### FACULTY POSITIONS IN MICROBIOLOGY AND IMMUNOLOGY

The Department of Microbiology and Immunology, University of Health Sciences/The Chicago Medical School, invites applications for tenure-track faculty positions at the rank of assistant or associate professor. Applicants must have a Ph.D. and/or M.D. degree with solid training, research experiences, and interests in molecular biology, medical virology, or immunogenetics. The successful candidate will be expected to develop and maintain a strong independent research program and to participate in teaching medical and graduate students. The salary will be commensurate with qualifications, and a negotiable starting date. Applicants should send curriculum vitae, a brief outline of current and future research plans, and the names of three references to:

**Yoon Berm Kim, M.D., Ph.D.**  
Professor and Chairman  
Department of Microbiology and Immunology  
University of Health Sciences/  
The Chicago Medical School  
3333 Green Bay Road  
North Chicago, IL 60064

*An Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

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

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

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

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

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

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

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

### FACULTY POSITIONS IN PHARMACOLOGY

The Department of Pharmacology of the University of Illinois College of Medicine seeks applications from highly qualified scientists capable of establishing independent research programs and collaborative ties with ongoing research. Appointments will range from assistant professor to full professor, depending on qualifications. Minimal qualifications include a Ph.D. and/or M.D. degree with a strong track record in research. Ongoing research programs are focused on cardiovascular, biochemical toxicology, and neuropharmacology problems. Duties include instruction to medical, dental, and graduate students. Send curriculum vitae and the names of four evaluators to: **Pharmacology Search Committee, Department of Pharmacology, University of Illinois College of Medicine, 835 South Wolcott, Chicago, IL 60612.** For full consideration, apply by 30 September 1987. *The University of Illinois is an Equal Opportunity/Affirmative Action Employer, and encourages applications from women and minorities.*

### TWO FACULTY POSITIONS IN FOOD RELATED BEHAVIOR

(1) **ASSOCIATE or FULL PROFESSOR** with doctorate in biological or behavioral science, training and experience in psycho-physiological aspects of taste and food related behavior, outstanding research achievements, and successful funding record.

(2) **RANK OPEN** for doctorate in food science (not food technology), training in experimental foods, food chemistry, food related behavior, and sensory/textural evaluation. Apply by sending letter of application, résumé, transcripts, and names of three references before 15 November 1987, to: **Dr. Eleanor Williams, Department of Food, Nutrition and Institution Administration, University of Maryland, College Park, MD 20742.** *An Equal Opportunity/Affirmative Action Employer.*

**FACULTY AND POSTGRADUATE APPOINTMENTS** at the Bureau of Engraving and Printing in Washington, D.C.—Several positions available to participate in research projects involving chemistry, physics, and technology of papers and polymers, characterization of elastomers, thermal analysis, experimental design, process engineering and control, electronic engineering, optics, microscopy, spectroscopy, graphic arts, computer science, and artificial intelligence. Contact: **Research Participation Program/BEP, University Programs Division, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831-0117.** Telephone: 615-576-3190.

## POSITIONS OPEN

### FACULTY POSITION— PHYSICIAN/SCIENTIST— HEMATOLOGY/ONCOLOGY.

Excellent scientific milieu, protected time for research, start-up support for laboratory program, tenure track. Substantive research training background required. Contact: **I. David Goldman, M.D., Chairman, Division of Hematology/Oncology, Medical College of Virginia Box 230, Richmond, VA 23298.** *An Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

The University of Wyoming, College of Agriculture, is seeking applications and nominations for **HEAD, DEPARTMENT OF ANIMAL SCIENCE.** Applicants must have a Ph.D. in a discipline of animal or meat/food science and have a proven record of accomplishment in research, teaching and/or extension education. Established evidence of administrative effectiveness or potential is desired. The Head is responsible for direction of research, teaching and extension programs, fiscal and personnel matters, and communication within and outside the university. The department has programs dedicated to undergraduate teaching, graduate education (M.S./Ph.D.), fundamental and applied research, and extension education services. The department houses 18 faculty members. Salary commensurate with qualifications and experience. Application deadline: 15 November 1987, or until an appropriate candidate is identified. Appointment date: 1 July 1988. Qualified persons should submit a letter of application, complete résumé, and request three persons to forward letters of reference. Written nominations are invited. Contact: **W. J. Murdoch, Search Committee Chair, Department of Animal Science, P. O. Box 3684, University Station, University of Wyoming, Laramie, WY 82071.** *The University of Wyoming is an Equal Opportunity Employer.*

**IMMUNOLOGISTS**—Assistant professor, research associate and associate director of clinical immunology laboratory. Expected to bring or develop funded independent research program and participate in current human immunology projects (transplantation, leukemia and HIV). Send curriculum vitae or inquire: **Harold Lischner, M.D., Section of Immunology and Rheumatology, Department of Pediatrics, Temple University School of Medicine at St. Christopher's Hospital for Children, 2600 North Lawrence Street, Philadelphia, PA 19133.** *An Equal Opportunity/Affirmative Action Employer.*

**IMMUNOLOGIST/IMMUNOCHEMIST:** Pierce Chemical Company is seeking two scientists with a Ph.D. in immunology/immunochimistry and 3 to 5 years of postdoctoral experience. These positions will offer significant opportunities for creative development and personal achievement in the area of immunological reagents and techniques. The successful candidates will possess a good working knowledge of various immunological techniques, excellent communication and interpersonal skills and a proven record of achievement. Please send curriculum vitae and salary history to: **Shelly Volden, Pierce Chemical Company, P.O. Box 117, Rockford, IL 61105.** *Equal Opportunity Employer.*

### IMMUNOLOGIST—MICROBIOLOGY FACULTY POSITION

Medical School Department of Microbiology seeks candidates for assistant professorship (tenure track). Position is available 1 June 1988. Starting date is negotiable, and position will remain open until filled. Experience in the molecular biology of the immune response is desirable. Responsibilities include team-teaching in the second year Medical Microbiology course for medical students and in graduate courses. The candidate will be expected to develop his/her own independent research program. Doctoral degree and postdoctoral research experience are required. Salary commensurate with training and experience. Please submit curriculum vitae and bibliography, description of research interests, major publications, and names of three professional references to: **Randall K. Holmes, M.D., Ph.D., Professor and Chairman, Department of Microbiology, c/o Civilian Personnel Division, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, MD 20814-4799.** Curriculum vitae will not be returned. *Equal Opportunity/Affirmative Action Employer.*



## UNDERGRADUATE RESEARCH

The U.S. Department of Energy offers college juniors and seniors the opportunity to do research at five federal laboratories. Qualified students spend one academic term in energy-related research at the frontier of science with state-of-the-art facilities and equipment.

### BENEFITS

- Stipends up to \$175 per week
- Round-trip travel and housing
- Academic credit may be arranged through the home institution
- Research Areas include: computer sciences, engineering, environmental and life sciences, mathematics, and physical sciences

For detailed information and application forms, please write to this address:

Science and Engineering Research Semester  
U.S. Department of Energy  
Office of Energy Research, Room 3F-061  
1000 Independence Avenue, SW  
Washington, D.C. 20585

Application Deadline: October 30, 1987

## ASSOCIATE EDITOR SCIENCE MAGAZINE

Editorial position available for a Ph.D. earth scientist with two or three years research experience and publications in the refereed literature. The successful candidate should be well-versed in both quantitative and qualitative aspects of geophysics, geochemistry, and atmospheric and oceanographic sciences. General interest in physical sciences is expected. Initial duties will include editing manuscripts for clarity and style, with progress to wide responsibilities in manuscript selection. Previous editorial experience not required. This is a full-time position in our Washington, D.C. editorial office.

Please submit résumé with cover letter, including salary requirements, to:

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

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## ASSOCIATE SCIENTIST

Miles, Inc., Diagnostics Division is seeking a highly motivated individual with a B.S. in Biology or Biochemistry with 3-4 years of laboratory and/or production experience.

The successful applicant should have a protein chemistry background with emphasis in cell biology and recombinant technology. Knowledge of bioseparation techniques is highly desirable. Position will be responsible for product and process development and the quality assurance and tech service needs of customers in biotechnology industry.

Interpersonal skills are vital in the close working proximity of our plant.

Excellent benefits and competitive pay are offered. If interested, please send resume and references to:



Manager of Employment  
Miles Inc.  
Diagnostics Division  
195 W. Birch Street  
Kankakee, IL 60901

AN EQUAL OPPORTUNITY EMPLOYER M/F/H

## THE LADY DAVIS FELLOWSHIP TRUST

P.O. Box 1255, Jerusalem 91904, Israel

### GRADUATE, POST-DOCTORAL AND PROFESSORIAL FELLOWSHIPS FOR 1988-89 AT THE HEBREW UNIVERSITY OF JERUSALEM OR THE TECHNION-ISRAEL INSTITUTE OF TECHNOLOGY

Lady Davis Fellows are selected on the basis of demonstrated excellence in their studies, promise of distinction in their fields of specialization and qualities of mind, intellect and character.

**GRADUATE AND POST-DOCTORAL FELLOWSHIPS** are tenable for a full academic year and may be extended for another year. Post-doctoral applicants to the Hebrew University may apply not later than 3 years after completion of their Ph.D. dissertation.

**VISITING PROFESSORSHIPS** are intended for applicants with the rank of Full or Associate Professor at their own institution. They are tenable from one semester to a full academic year.

The grant covers travel, reasonable living expenses and tuition fees (wherever applicable).

Requests from applicants (including Israelis) should indicate category of Fellowship and should be sent to the above address. Completed forms in all categories must reach Jerusalem not later than November 30, 1987.

# **[ DIRECTOR OF MATHEMATICAL AND INFORMATION SCIENCES ]**

**(#86-452)**

The Air Force Office of Scientific Research, Air Force Systems Command, located at Bolling Air Force Base in Washington DC, invites applications from individuals with background in Government, university and industrial mathematical or information sciences research. An earned Bachelor's degree with 24 semester hours of math is required. An earned Master's degree is desirable, and a PhD (or equivalent) in the mathematical sciences is highly desired. The Director is responsible for the management of the Air Force Basic research program in mathematical and information sciences under contract to universities and in Air Force Laboratories. A strong background and publication record in one or more of the mathematical or information sciences fields of control theory in information science, computational mathematics, applied analysis, probability and statistics, optimization, and discrete mathematics is required. Experience should include technical, program supervision, planning and budgeting. The position is Senior Executive Service (General) with a salary range of \$64,700 to \$73,400. No prior Government service is required. Send Standard Form 171, "Application for Federal Employment", as well as narrative statements addressing: (1) technical qualifications; and (2) managerial qualifications, including a list of publications to:

**Civilian Personnel Office  
1776 MSSQ/DPCA-86-  
ATTN: Mrs. Davis  
Andrews AFB, MD 20331-5964**

*Include Announcement # 86-452 on your application.  
Application must be received by 30 Sept 1987.*

AN EQUAL OPPORTUNITY EMPLOYER

# **PATHOLOGY**

Two postdoctoral research positions are available immediately in a productive, well NIH-funded group studying the effects of chronic alcohol consumption on the molecular structure, composition and function of biological membranes. Applicants should have either a strong background in NMR and/or ESR characterization of biological membranes or lipid (biochemistry). Facilities include multi-nuclear Bruker AM 360 wide-bore NMR, IBM ER-200D ESR, Analytical and Preparative HPLC and Hewlett Packard 5890 Capillary GLC. Highly competitive salary offered. Send curriculum vitae, a brief statement of research interests and names of 3 references to:

**Dr. Theodore F. Taraschi  
Dept. of Pathology and Cell Biology  
Thomas Jefferson University  
Rm. 405, Foerderer Pavillion  
11th & Walnut Sts.  
Phila., PA 19107.**



*Equal Opportunity Employer*

# **HEAD**

**Department of Medicinal Chemistry and Pharmacognosy  
College of Pharmacy  
University of Illinois at Chicago  
Chicago, IL 60612**

The Department of Medicinal Chemistry and Pharmacognosy, University of Illinois at Chicago, seeks an energetic and dedicated scholar as its Head to replace Professor James Gearien, who has dedicated his academic life to the development of this Department, and who will be retiring effective September 1, 1988.

With 21 faculty, 45 graduate students and a number of postdoctoral associates and support personnel, the Department constitutes one of the major programs of its type in the country. It has excellent physical plant facilities and access to extensive research equipment (FT-IR, two VAX computers, high performance molecular graphics terminals, extensive molecular modeling software, four 200-360 MHz NMR spectrometers, and two mass spectrometers). An extended field, high resolution FAB mass spectrometer and a 500 MHz NMR spectrometer are soon to be purchased. The Department has emerging strengths in a wide range of disciplines emphasizing: molecular modeling, natural products, spectroscopy, synthetic chemistry, and QSAR.

The College of Pharmacy is committed to a top-ranked program of research and graduate education in the pharmaceutical sciences, while maintaining its strong professional program. In this regard the new Department Head will continue his or her own active research program in addition to providing the paramount qualities of vision and leadership necessary to further develop the Department. The successful applicant must have a doctorate related to medicinal chemistry, natural product chemistry, or an allied field. A first degree in Pharmacy is desirable.

Applications and nominations will be received by Professor Duane L. Venton, Chair, Search Committee, at the address listed above. Applications should be accompanied by a complete vitae including: a full list of publications, experience with extramural funding and evidence of administrative experience. This information should be received by October 31, 1987.

*The University of Illinois is an equal opportunity/affirmative action employer and encourages applications from women and minorities.*

# **AAAS Memberships and Subscriptions**

- Whenever you write us about your membership or subscription, please attach a Science address label to ensure prompt service.
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  - ☐ \$130 air-surface delivery via Holland
- ☐ **Subscriber rates**
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  - ☐ \$163 air-surface delivery via Holland

- ☐ Payment enclosed    ☐ Bill me later

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# AIDS Research Opportunities at Smith Kline & French Laboratories

SmithKline Beckman has a strong commitment to research on AIDS. The research efforts of the corporation are being undertaken on a worldwide basis to include activities encompassing novel reagents for diagnostic testing, vaccines for prophylaxis and novel therapeutic drugs for treatment of the disease.

A multidisciplinary research group has been established at SK&F's Research and Development Laboratories with partial support from the National Institutes of Health to undertake research on the expression and purification of human immunodeficiency virus proteins and the development of experimental and theoretical methods to study their structures.

We are seeking individuals for positions as postdoctoral scientists to work in the following areas:

- **MOLECULAR GENETICS** - Experience in recombinant DNA Technology and gene expression/regulation in prokaryotes is desired.
- **PROTEIN PURIFICATION AND PROCESSING** - Experience with innovative methods for purification and characterization of proteins, receptor-ligand interactions and structure-function studies.
- **X-RAY CRYSTALLOGRAPHY** - Scientists with backgrounds and/or interests in protein and small molecule X-ray crystallography and macromolecular structure.
- **NUCLEAR MAGNETIC RESONANCE** - Applicants should have experience in high field 2D NMR methods and their application to the structures of macromolecules and ligand/macromolecule interactions.
- **MASS SPECTROMETRY** - Individuals with experience in application of mass spectrometry to oligosaccharides and proteins and a good background in analytical biochemistry are preferred.
- **IMMUNOLOGY AND CELL BIOLOGY** - Candidates with knowledge of lymphocyte biology with special reference to the isolation and characterization of lymphocyte surface receptors and biochemistry of lymphocyte activation are desired.

Excellent facilities are available at SK&F's new research center located near Valley Forge, PA. The facilities include an X-ray crystallography laboratory with an Enraf-Nonius CAD-4 system, a rotating anode generator, a Supper precision camera and a Xentronics multiwire area detector, a dedicated VAX-785 computer and access to PS-300 computer graphics systems. The mass spectrometry facility consists of three Finnigan-MAT quadrupole spectrometers, a VG ZAB-1F high resolution high mass range instrument and a VG ZAB-SE 4F tandem mass spectrometer equipped for operation at ultra-high mass range. The NMR laboratory has available for this research two 400 MHz and a 500 MHz instrument, off-line processing using a micro VAX linked to a VAX cluster 8700, 8650(2) and 785(4) via Ethernet. Advanced facilities for research employing flow cytometry are available.

We offer an excellent compensation, benefits and relocation package as well as opportunities for personal and professional growth. Publication of research results is encouraged and supported. For confidential review, please forward your C.V. and names of three references to: Robert F. Obst, R&D Senior Employment Consultant, R0089, Smith Kline & French Laboratories, Research and Development Division, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.

**SK&F**  
A SmithKline Beckman Company

## POSITIONS OPEN

**IMMUNOLOGIST.** The Smith College Department of Biological Sciences invites applications for a tenure-track position in immunology at the assistant professor level to start in either January or September 1988. The candidate should have a Ph.D., an interest in teaching, and a research program in which undergraduates can participate. Teaching duties will include an advanced course in immunology and participation in an intermediate course in cell biology. The department is located in a modern, well-equipped science center with funds available to initiate a vigorous research program. Located in western Massachusetts, Smith College is a leader in the education of women, and has an outstanding record in the number of professional women biologists who are alumnae. The Five College Consortium, which includes Smith, Amherst, Mount Holyoke and Hampshire Colleges, and the University of Massachusetts, provides a rich intellectual and cultural life for faculty and students, as well as additional collegial opportunities in teaching and research. The successful candidate may apply to become an Associate Faculty Member of the University of Massachusetts Graduate Program in Molecular and Cellular Biology, an extremely active program with approximately 40 faculty members and 35 graduate students. Curriculum vitae, a statement of teaching and research interests, and three letters of recommendation should be sent to: **Dr. Steven A. Williams, Chair, Search Committee, Department of Biological Sciences, Clark Science Center, Smith College, Northampton, MA 01063.** Applications should be received by 30 September 1987. *Smith College is an Equal Opportunity Employer. Women and minorities are encouraged to apply.*

**INFECTIOUS DISEASES**—The Department of Veterinary Science, University of Wisconsin-Madison, invites applications for a tenure-track faculty position at the level of **ASSISTANT PROFESSOR.** The candidate is expected to develop an independent research program in infectious diseases and to direct graduate student training. The primary teaching responsibility is a graduate level course in his/her area of research expertise. Opportunities exist for collaboration with departmental faculty having research programs in immunology, molecular and cellular biology, virology, experimental pathology, microbiology, reproductive and cardiopulmonary physiology, and parasitology. Departmental facilities include a P3 laboratory. Candidates must possess a Ph.D., D.V.M.-Ph.D. or M.D.-Ph.D. degree(s). Submit curriculum vitae, description of research goals, teaching experience and names of four references to: **Professor John M. Mansfield, Department of Veterinary Science, 1655 Linden Drive, Madison, WI 53706.**

*The University of Wisconsin-Madison is an Affirmative Action/Equal Opportunity Employer.*

**INSTRUCTOR/ASSISTANT PROFESSOR IN ANATOMY.** Applications are invited from qualified individuals possessing the Ph.D. or M.D. degree for two faculty positions: A postdoctoral instructorship, and an assistant professorship requiring a minimum of 2 years of postdoctoral studies. The responsibilities of the positions include participation in the microscopic and neuroanatomy courses taught to medical and graduate students, and demonstration of an active, productive research program. Applications, including curriculum vitae and names of three references, should be sent before 1 March 1988.

**Anthony J. Schmidt, Ph.D.**  
Professor and Chairman  
Department of Anatomy  
Rush Medical College  
600 South Paulina Street  
Chicago, IL 60612

*Rush University is an Equal Opportunity/Affirmative Action Employer.*

## INSTRUCTOR OR POSTDOCTORAL

Position available immediately to study the expression and regulation of thiamin pyrophosphate-dependent enzymes in brain, and the molecular basis of enzymatic abnormalities in neurologic disorders. Strong background in molecular biology or neurobiochemistry with experience in molecular biology is required. Send curriculum vitae, statement of research interest, and names of references to: **Dr. Kwan-Fu Rex Sheu, Cornell University Medical College/Burke Rehabilitation Center, 785 Mamaroneck Avenue, White Plains, NY 10605.** *Equal Opportunity Employer M/F.*

## POSITIONS OPEN

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

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

## JUNIOR AND SENIOR FACULTY POSITIONS ANIMAL VIROLOGY

The Department of Microbiology and Immunology invites applications for junior and senior level, tenure-track positions focusing on the molecular analysis of significant problems in Animal Virology. Senior candidates should have strong records of research accomplishment with sustained program growth and development. Junior candidates will be expected to develop high quality, independent research programs with long-term growth potential. Teaching responsibilities, which emphasize quality rather than quantity, include medical, dental, and graduate students. A large Center of Excellence grant has resulted in establishment of a Molecular Resource Center within the Department featuring state-of-the-art facilities for: oligonucleotide synthesis, peptide synthesis, hybridoma antibody production, amino acid analysis, protein/sequencing and flow cytometry. Funds for the initiation of research programs will be available and salaries will be highly competitive. Applications should consist of curriculum vitae, copies of several recent publications, a brief statement of future research goals, and three letters of reference to be sent to: **Dr. Terrance G. Cooper, Department of Microbiology and Immunology, University of Tennessee, Memphis, 858 Madison Avenue, Memphis, TN 38163.** Applications will be received until 15 October 1987 or until the positions are filled thereafter. *The University of Tennessee is an Affirmative Action/Equal Opportunity Employer.*

**LABORATORY DIRECTOR/CLINICAL CHEMIST.** Required to direct operations of the Radioimmunoassay Core laboratory of the Diabetes Endocrinology Research Center of the University of Washington. The applicant should have a Ph.D. or M.S. degree and a strong background in peptide chemistry and development of radioimmunoassays. The applicant will be directly responsible to the Core director and will supervise two technicians. *The University of Washington is an Affirmative Action Employer.* Inquiries, applications and curriculum vitae should be directed to: **Leslie J. Klaff, M.D., Ph.D., 1200 12th Avenue South, Qtrs. 8/9, Seattle, Washington 98144.** The position closes 15 October 1987.

## LIPOPROTEIN BIOCHEMIST

Applications are invited for appointment as Section Head of Lipoprotein Biochemistry in a newly-established Cardiovascular Research Center whose focus is on a multidisciplinary approach to mechanisms initiating and potentiating atherosclerosis. Position entails establishment of a research group in the area of lipoprotein biochemistry and metabolism which will interface with other scientists of varied expertise. Applicants should be established in the field, with demonstrated ability to obtain major funding and actively collaborate with other disciplines. The Center will be housed in a new research building scheduled for completion in the summer of 1988. Start-up funds are available, and salary and fringe benefits are attractive. Please send a statement of research interests and complete curriculum vitae to **Box 124, SCIENCE.**

## MOLECULAR BIOLOGIST

For research associate or senior research associate position in a laboratory interested in application of spectrophotometric, electrophysiologic, biochemical, and molecular biological techniques to investigations in membrane biophysics and cell biology. Excellent opportunity for basic molecular biologist to develop applications to physiologic approaches. Send curriculum vitae and three references to: **Dr. R. Johnson, Howard Hughes Medical Institute, University of Pennsylvania School of Medicine, Johnson Pavilion, Room 360, Philadelphia, PA 19104.**

## POSITIONS OPEN

**MOLECULAR BIOLOGIST, Ph.D.,** to work in a prestigious university in Southeast on oncology-related topics. Salary based on experience. Send résumé to: **Box 129, SCIENCE.**

## MOLECULAR BIOLOGIST RETINOID RESEARCH

Research faculty position available for Ph.D. with at least 2 to 3 years of postdoctoral training and experience. Conduct independent and collaborative research in the areas of retinoids and retinoid-binding proteins. Interests include regulation of gene expression and cell differentiation. Serve as a key member of a well-funded research group exploring the metabolism, regulations, functions, and roles of retinoids and their binding proteins. Expertise in commonly utilized recombinant DNA methodologies essential. Salary negotiable. Send curriculum vitae, bibliography, and selected reprints, and names of three references to: **Dr. DeWitt S. Goodman, Columbia University, College of Physicians and Surgeons, 630 West 168th Street, New York, NY 10032.** *An Affirmative Action/Equal Opportunity Employer.*

**MOLECULAR BIOLOGY RESEARCHER:** Perform basic research in molecular parasitology to develop vaccines for clinical usage. Perform experiments using a genetic approach to parasitic protozoans. Ph.D. in biochemistry and 3 months of experience, or 3 months in related scientific research required. Forty hours per week, \$25,637 per year. D.O.T. 041061026 Mail résumé to: **N.Y.S. Job Service J.O. #8026995, 247 West 54th Street, 4th Floor, New York, NY 10019.**

## MOLECULAR BIOLOGY

Applications are invited for appointment as Section Head of Molecular Biology in a newly-established Cardiovascular Research Center whose focus is on a multidisciplinary approach to mechanisms initiating and potentiating atherosclerosis. Position entails establishment of a research group in the molecular biology of vascular cells or lipoproteins which will interface with other scientists of varied expertise. Applicants should be established in the field, with demonstrated ability to obtain major funding and actively collaborate with other disciplines. The Center will be housed in a new research building scheduled for completion in the summer of 1988. Start-up funds are available, and salary and fringe benefits are attractive. Please send a statement of research interests and complete curriculum vitae to **Box 123, SCIENCE.**

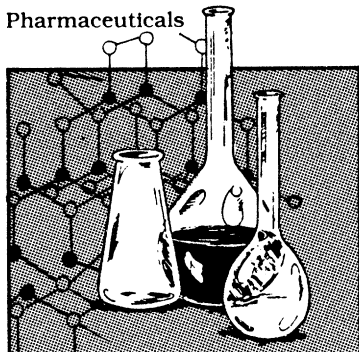
**MOLECULAR BIOSCIENCE.** Lehigh University announces four **TENURE-TRACK FACULTY POSITIONS** in molecular bioscience. Appointments will be made in the departments of biology and chemistry. Applications will be accepted at all levels, although a minimum of 2 years of postdoctoral experience is expected. We are looking for specialties in immunology, molecular biology, protein chemistry, cellular biology, and tissue culture. Faculty are expected to participate actively in either the biology or biochemistry teaching programs, and to maintain an active involvement in research through the Center for Molecular Bioscience and Biotechnology.

Positions are available for any starting date after January of 1988. Applicants should apply to: **Dr. Arthur Humphrey, Chair, Interdisciplinary Search Committee for Faculty in Molecular Bioscience, 570a Whitaker Laboratory, Lehigh University, Bethlehem, PA 18015.** Considerations of applications will begin by 30 September 1987. *Lehigh University is an Affirmative Action/Equal Opportunities Employer.*

Institute for Molecular Virology/Department of Biochemistry—University of Wisconsin, Madison. **MOLECULAR VIROLOGIST** at any level. Virus crystallographers are encouraged to apply. Salary commensurate with level of appointment. Applicants should submit curriculum vitae, bibliography, letters of reference from three persons knowledgeable of the candidate's research and teaching ability, and a one- or two-page statement of future research interests to: **Roland Rueckert, Chairman, Faculty Search Committee, Institute for Molecular Virology, University of Wisconsin-Madison, 1525 Linden Drive, Madison, WI 53706** by 18 September 1987. *The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.*



Pharmaceuticals



## **Bristol-Myers Offers Opportunities in Molecular Biology Central Nervous System Research**

### **At our new multi-million dollar Research Facility.**

If you are looking for a highly visible position that offers growth, stability and recognition, you could find no better place than at our newly constructed, multi-million dollar research facility in Wallingford, CT. Our continued growth, our investment in the future and our commitment to increased efforts in central nervous system molecular biology research have created the following outstanding career opportunities:

#### **MOLECULAR NEUROBIOLOGIST**

PhD with experience in cloning, in situ hybridization, in vivo models, including xenopus oocytes, and other molecular approaches to psychiatric and neurologic disorders. Should have 1-4 years relevant postdoctoral experience.

#### **NEURONAL CELL BIOLOGY**

BS with ability to implement experimental protocols and test systems. One or more years experience in cell/tissue culture.

#### **NEUROANATOMY**

BS with one or more years experience with light microscopy and histological techniques. Ability to work with in vivo laboratory models and with radioisotopes.

Bristol-Myers offers a highly competitive salary commensurate with your professional qualifications, liberal benefits and a stimulating environment in which to pursue your career.

Qualified individuals are invited to submit their resumes with salary expectations, in complete confidence to: **Bristol-Myers Company, PD-31, Pharmaceutical Research & Development Division, P.O. Box 5100, 5 Research Parkway, Wallingford, CT 06492. Principals only.** An equal opportunity employer.

## **Bristol-Myers**

The LILLY RESEARCH LABORATORIES, a Division of Eli Lilly and Company, is seeking candidates to join a stimulating, multi-disciplinary research group in the Department of Biochemical Toxicology.

## **SENIOR SCIENTIST** **Cardiovascular or Central Nervous System**

Qualified applicants should have a doctoral degree in pharmacology, toxicology, or physiology, and a demonstrated ability to perform independent and creative research involving cardiovascular or central nervous system function. Post-doctoral training is preferable, but not essential. Experience in cardiovascular or central nervous system pharmacology/toxicology utilizing a variety of *in vivo* and *in vitro* models is required. The primary responsibilities will be to profile new therapeutic agents for broad pharmacologic and toxicologic effects and to investigate mechanisms of toxicity.

## **SENIOR SCIENTIST** **Toxicokinetics**

Qualified applicants should have a doctoral degree in pharmacology, toxicology, or related areas with experience in pharmacokinetics, drug disposition, and a general background in toxicology; post-doctoral training is preferable, but not essential. The primary responsibilities will involve support of the preclinical toxicologic evaluation of new therapeutic agents through the design, conduct, and evaluation of toxicokinetic studies. These studies will be directed toward providing insights into mechanisms of toxicity, dose selection, and the effects of pathophysiologic changes on drug disposition.

## **ASSOCIATE SCIENTIST** **Nephrotoxicity**

Qualified applicants should have a B.S. or M.S. degree with a basic knowledge of renal physiology and pharmacology. Experience in animal handling and general laboratory techniques is required; experience with *in vitro* techniques, computerized data analysis, and scientific writing is desirable. The primary responsibilities will be to assist in the evaluation of the nephrotoxic potential of new therapeutic agents and to investigate mechanisms of nephrotoxicity.

Qualified candidates should send detailed curriculum vitae to:

Ms. Carol Zapapas  
Personnel Representative—GB992  
Eli Lilly and Company  
Greenfield Laboratories  
P. O. Box 708  
Greenfield, IN 46140



An Equal Opportunity Employer

## POSITIONS OPEN

### DIVISION OF NUTRITIONAL SCIENCES CORNELL UNIVERSITY POSITION ANNOUNCEMENT NUTRITIONAL BIOCHEMIST

The Division of Nutritional Sciences seeks to fill a tenure-track position (rank open) in nutritional biochemistry.

The Division of Nutritional Sciences is a broadly based interdisciplinary unit concerned with the chemical, biological, and social science aspects of nutrition. The successful applicant will have a joint appointment in the section of biochemistry, molecular and cell biology of the Division of Biological Sciences and the Division of Nutritional Sciences and will be expected to maintain the close ties between these two academic units by participating in programs in both nutrition and biochemistry.

Candidates should have a doctoral degree in biochemistry or nutrition, postdoctoral experience, and show strong potential for accomplishment in research and teaching. The research programs of the candidates must be relevant to nutrition; however, applications are welcome from individuals with interests in any area of biochemistry or molecular and cell biology. Individuals with an interest in molecular biology and genetics are encouraged to apply. The successful applicant will be expected to teach at the undergraduate and graduate levels and to maintain a strong research program suitable for graduate student training in a broad area of biochemistry, including nutritional biochemistry.

Qualified applicants should submit, by 1 December 1987, curriculum vitae, list of publications, a brief statement of research and teaching interests, and the names and addresses of three references to:

**Dr. Andre Bensadoun**  
Division of Nutritional Sciences  
Cornell University  
242 Savage Hall  
Ithaca, NY 14853

*Cornell University is an Equal Opportunity/Affirmative Action Employer.*

**ORAL MICROBIOLOGIST:** University of Washington, School of Dentistry, has a tenure-track faculty position available for an oral microbiologist in the Department of Oral Biology. Candidates must have a Ph.D. degree or the equivalent. In addition, a D.D.S. or D.M.D. degree is highly desirable. The successful applicant will be expected to develop an independent and funded research program in the field of oral microbiology and to teach oral microbiology to dental and graduate students. A research interest in either cariology or periodontal disease is preferred. Affiliation with the Department of Microbiology of the School of Medicine is negotiable and encouraged. Rank and salary will be commensurate with qualifications and experience. For further information, please contact:

**Dr. Murray Robinovitch**  
Department of Oral Biology, SB-22  
University of Washington  
Seattle, WA 98195

Deadline for applications is 15 October 1987. *The University of Washington is an Equal Opportunity Employer. Women and minorities are encouraged to apply.*

**PHARMACOLOGIST, Ph.D.,** to work in a prestigious university in Southeast on oncology-related topics. Salary based on experience. Send résumé to: **Box 130, SCIENCE.**

**PHARMACOLOGIST.** Applications are invited for a tenure-track faculty position in the Department of Pharmacology, University of South Carolina School of Medicine. Ph.D. and/or M.D. degree and postdoctoral experience required. The successful candidate will be expected to develop an independent research program which merits extramural support and to teach medical/graduate students. Individuals should submit curriculum vitae, statement of professional goals, and the names of three references to: **Dr. D. O. Allen, Chairman, Department of Pharmacology, University of South Carolina School of Medicine, Columbia, SC 29208.** *The University of South Carolina is an Equal Opportunity/Affirmative Action Employer.*

## Vice President Research & Development

### **With Johnson & Johnson, The Next Breakthrough in Home Diagnostics Can Be Yours.**

Johnson & Johnson, through its major home-testing subsidiary, Lifescan, has made a major commitment to self-diagnostic health care. Home testing, including blood glucose monitoring for diabetics, is a \$400 million business annually. The challenge it creates for a Vice President, Research & Development is an exciting one.

Reporting directly to the president, you will establish the company's research and development goals and will provide overall direction to the R & D effort. Further, you'll manage all of the company's technical activities, particularly in the areas of chemistry, physics and electro-mechanical research.

Superior academic credentials, including a Ph.D. in one of the Sciences are required. You'll also need 10+ years' of significant achievement in medical diagnostics, including analytical/physical chemistry, new product research, and demonstrated product innovation and development. Four or more years of senior-level technical management are also required.

This is an exciting opportunity for you and for the people whose lives you can improve. Please submit your resume and salary history, in confidence to: Human Resources-Dept. 1/887, Lifescan Inc., 2443 Wyandotte Street, Mountain View, CA 94043. An Equal Opportunity Employer.

**LIFESCAN** INC. a Johnson & Johnson company

## Peptide Pharmacologist

A position is available for a Peptide Pharmacologist to conduct research as a member of a multidisciplinary group, focusing on the discovery of proprietary peptides for regulation of growth in domestic livestock. In the near term, research will concentrate on growth hormone release stimulated by growth hormone-releasing factor. The candidate must be motivated to understand the peptide-receptor interactions at the molecular, cellular, and whole animal level and to apply this knowledge to peptide design. The incumbent will interact with peptide chemists and both *in vitro* and *in vivo* biologists to facilitate the discovery and development of potent, proprietary peptides based on the relationship between the biological effect and chemical composition of the peptide. The successful candidate must have a Ph.D. or post-doctoral experience and a background in study of peptides as pharmaceutical agents may include training in receptor pharmacology, pharmacodynamics, membrane biophysics, or endocrinology. Skills would include tissue culture, HPLC, radiometric/immunologic techniques, and a willingness and ability to work as a member of a research team is essential.

Kalamazoo is a medium-sized Southwestern Michigan community with immediate access to a mix of excellent cultural, educational and recreational pursuits, including numerous lakes and a four-season climate. Upjohn offers an excellent salary, commensurate with experience and an outstanding benefits program. For confidential consideration, please call toll free 1/800/253-8600, ext. 3-6767, (inside Michigan call collect 616/323-6767) to request an employment application be sent to you. Please refer to Ad Number 21701-F when calling.

**Upjohn**

**Our commitment to scientific excellence continues...**

An Equal Opportunity Employer M/F

## TEXAS A&M UNIVERSITY

### FACULTY POSITIONS IN THE DEPARTMENT OF BIOLOGY

Dedicated and innovative scientists who wish to join a dynamic and developing department are encouraged to apply for tenure track positions in the Biology Department. Up to nine positions are available; of these, at least four will emphasize research and instruction in microbiology.

#### Areas of Special Interest to the Department

<b>Microbiology</b>	Actinomycete or streptomycete molecular biology
	Molecular virology
	Molecular biology of <i>Rhizobium</i> or other microbial symbiont
	Molecular biology of yeast
	Molecular immunology and immunochemistry
<b>Zoology</b>	Molecular parasitology
	Molecular endocrinology or neurobiology
	Developmental molecular biology of <i>Drosophila</i> or <i>C. elegans</i>
<b>Botany</b>	Molecular ultrastructure of plant and plant-microbial systems
	Molecular and cellular biology of transgenic plants
	Molecular evolution (restriction fragment length polymorphisms)
	Organelle (especially mitochondrial) molecular biology
<b>Other</b>	Macromolecular modeling and analysis
	RNA processing and macromolecular evolution
	Molecular biology of glycoproteins and lipoproteins
	Membrane structure and function

#### Background

The Department of Biology awards Ph.D. and M.S. degrees in Biology (emphasis on molecular biology), Botany, Microbiology, and Zoology. There are currently 41 faculty and 130 graduate students. The Department has excellent facilities and is currently benefitting from a phased \$7 million renovation program.

Evaluation of applicants will include their past performance (research papers, grants, patents, teaching experience), future interests, potential for attracting significant extramural research support, and interactive compatibility with current faculty and staff. Although we anticipate filling most positions at the assistant professor level, mid-career and senior applicants (for associate and full professorships) are also invited to apply. We are an equal opportunity employer; we consider only academic qualifications, recommendations and performance.

#### Application and Closing Dates

Applications should be received by October 1, 1987, but these positions will remain open until filled. Candidates should provide: a detailed vita, a statement of research interests and future plans, and the names of three references (these will not be contacted without prior consent from the candidate). Applications should be addressed to:

Dr. Timothy C. Hall  
Department of Biology  
Texas A&M University  
College Station, TX 77843-3258 USA

## POSITIONS OPEN

### PHYSICAL OCEANOGRAPHER UNIVERSITY OF SOUTH FLORIDA

The Marine Science Department, University of South Florida, invites applications for a 9-month academic year tenure-track faculty position in physical oceanography with emphasis on the dynamics of the ocean circulation. Areas of expertise to be considered included ocean-going experimentation, numerical modeling, and satellite remote sensing. The position will be available August 1988 with salary and grade according to experience. Please send a résumé, statement of research interests and teaching experience, and names and addresses of three references by 12 October 1987 to: **Chairman, Search Committee, Department of Marine Science, University of South Florida, 140 Seventh Avenue South, St. Petersburg, FL 33701.** *The University of South Florida is an Equal Opportunity Employer.*

**PHYSICIST, PLASMA (STAFF SCIENTIST, PHYSICIST).** To conduct research and development on techniques/devices for plasma generation by compression or explosion over wide range of parameters; responsible for design and operation of plasma generation and diagnostic equipment. Require Ph.D. in physics, minimum of 10 years of combined research experience including high density plasmas, knowledge of plasma spectroscopy diagnostics using laser and particle probing techniques, and sub-millisecond pulsed power engineering. Salary: \$48,500 per year, 40 hours per week. Send résumé, two references to: **Troy Job Service Office, Attention: Mr. Ernest Lail, 1801 Sixth Avenue, Troy, NY 12180.** Refer to Job Order 0400280 D.O.T. Code 023.061-014.

### PHYSIOLOGIST

The Sanders-Brown Center on Aging at the University of Kentucky invites applications for a tenure-track faculty appointment for a physiologist with research expertise in some aspect of the physiology of acute stroke. This position is part of a major multidisciplinary initiative in stroke research at the University. The successful candidate will have an academic appointment in the Department of Physiology and Biophysics or another appropriate department within the University. A letter of interest, a recent curriculum vitae and names of three references should be submitted to: **David R. Wekstein, Ph.D., Associate Director, Sanders-Brown Center on Aging, 101 Sanders-Brown Building, University of Kentucky, Lexington, KY 40536.** *The University of Kentucky is an Equal Opportunity Employer.*

### PLANT ECOLOGIST UNIVERSITY OF COLORADO AT BOULDER DEPARTMENT OF ENVIRONMENTAL, POPULATION AND ORGANISMIC BIOLOGY AND COOPERATIVE INSTITUTE FOR RESEARCH IN ENVIRONMENTAL SCIENCES

Tenure-track position, rank open, Department of Environmental, Population and Organismic Biology/Fellow Cooperative Institute for Research in Environmental Sciences (CIRES), beginning after 1 January 1988 to pursue research within the Center for the Study of Earth from Space (CSES) in the field of plant ecology, involving areas such as community ecology, ecosystem ecology, or ecophysiology.

Applicant should have a research background in ecology and plant science, with current or potential interest in application of new techniques involving remote sensing on a regional or global scale, and ability to attract research funding.

Teaching responsibilities will be in the Department of Environmental, Population and Organismic Biology.

Submit a letter of application, résumé, statement of research and teaching interests, and four letters of recommendation (requested by applicant) by 30 November 1987 to: **Chair, Search Committee, EPO Biology, Campus Box 334, University of Colorado, Boulder, CO 80309-0334.**

*The University of Colorado at Boulder has a strong institutional commitment to the principle of diversity in all areas. In that spirit, we are particularly interested in receiving applications from a broad spectrum of people, including women, members of ethnic minorities, and disabled individuals.*

## POSITIONS OPEN

### PLANT MOLECULAR BIOLOGIST

The Department of Biochemistry and the Agricultural Experiment Station of the University of California, Riverside, are seeking a new faculty member in the area of plant molecular biology. The position is to be filled at the assistant (tenure-track), associate or full professor level, commensurate with the experience of the successful candidate. The new faculty member will hold 11-month appointments jointly in the College of Natural and Agricultural Sciences and the Agricultural Experimental Station. Requirements for this position include a background in plant biochemistry and molecular biology, and a demonstrated record of productivity in the general area of molecular biological techniques as applied to plants. Both the strength of the existing research record and the potential for developing a strong, innovative research program will be considered for each candidate. Young scientists are encouraged to apply, as are minority and women candidates. Applicants should send curriculum vitae, and arrange to have at least three letters of recommendation sent to: **Justin K. M. Roberts, Search Committee Chairman, Department of Biochemistry, University of California, Riverside, CA 92521.** Application deadline is 31 October 1987 or later if suitable candidates have not been selected.

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

### PLANT TISSUE CULTURE

A leading international horticultural company has an immediate opening at the **ASSISTANT SCIENTIST** level in its corporate tissue culture laboratory. The qualifications for the position are a M.S. or B.S. in horticulture or related area of plant science and experience in plant tissue, cell and protoplast culture.

Send curriculum vitae to:

**Dr. C. Ed Green**  
Vice President of Research  
George J. Ball, Inc.  
P.O. Box 335  
West Chicago, IL 60185  
*Equal Opportunity Employer*

### POPULATION GENETICIST— AFRICANIZED BEES

The Department of Entomology, University of California, Davis, announces a 5-year assistant/associate research geneticist position on the genetics, population genetics, ecology, and management of the Africanized honey bee. Research will include: genetic differences between domestic and Africanized races, population genetics and population ecology of Africanized feral populations in relation to managed domestic populations, and theoretical and applied management programs. Much of the research will be done in Central and South America. Ph.D. with training and research interests emphasizing genetics of quantitative characters, population genetics, ecological genetics and experimental population biology; demonstrated research ability; postdoctoral experience desirable. Experience with bees desirable. Letter of application, curriculum vitae, reprints, names, and addresses of three referees should be sent to: **Robbin Thorp, Chair of the Search Committee, Department of Entomology, University of California, Davis, CA 95616** no later than **15 October 1987.** *The University of California is an Affirmative Action/Equal Opportunity Employer.*

**POSTDOCTORAL** fellow in brain microcirculation. Projects test effects of in situ endothelial injury and of pharmacologic probes on vasoactive responses in vivo. Physiology background in vascular research preferred. Résumé to: **W. Rosenblum, M.D., Box 17 MCV Station, Richmond, VA 23298.** Telephone: 804-786-9735. *Minorities and women encouraged to apply.*

### POSTDOCTORAL FELLOW

Position available immediately for NMR and other studies on proteins–water interaction. Applicants must have Ph.D. in biochemistry or chemistry. Please submit curriculum vitae with three reference letters. Send to:

**Dr. Chaim Frenkel**  
Department of Horticulture and Forestry  
Rutgers University  
Box 231  
New Brunswick, NJ 08903

## POSITIONS OPEN

**POSTDOCTORAL ASSOCIATE:** High field NMR studies of paramagnetic peroxidase heme enzymes. Candidates must have extensive NMR experience or a background in protein isolation/modification. Send résumé and names of three references to: **Harold Goff, Department of Chemistry, University of Iowa, Iowa City, IA 52242.** *The University of Iowa is an Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL FELLOW.** Position open for postdoctoral fellow with background in biochemistry or immunology. Work involves purification of stimulatory factors produced by virally transformed lymphocytes. Please send curriculum vitae and names of two references to: **Dr. B. Blazar, Department of Biological Sciences, Wellesley College, Wellesley, MA 02181.**

### POSTDOCTORAL FELLOW IN BIOCHEMISTRY

Department of Dermatology at the University of Cincinnati College of Medicine seeks postdoctoral fellow for biochemical studies of epidermal cells. Individual must be thoroughly acquainted with HPLC and similar technologies for purification of prostaglandins and/or peptides, with hormone mechanisms of action and regulation of cell division and differentiation. Applications accepted until position is filled. Submit résumé to: **James J. Nordlund, M.D., University of Cincinnati College of Medicine, Cincinnati, OH 45267-0592.** *Affirmative Action/Equal Opportunity Employer.*

### POSTDOCTORAL FELLOW OR RESEARCH ASSOCIATE

Tufts University School of Medicine announces the immediate opening of a position to characterize extracellular and intracellular inhibitors of cell proliferation [*Endocr. Rev.* 8, 44-52 (1987)] using genetic recombination techniques. Strong background in recombinant DNA technology required. Send curriculum vitae, description of research interest, and names and addresses of three references to: **Drs. A. M. Soto and C. Sonnenschein, Department of Anatomy and Cellular Biology, Tufts University School of Medicine, Boston, MA 02111.** *An Equal Opportunity Employer.*

**POSTDOCTORAL FELLOWS.** Applications are invited for positions in the following areas: Molecular genetics of human cancer (**W. Cavenee**); Developmental regulation of neuron and muscle specific transgenes (**A. Peterson**); Genome imprinting; gametic and preimplantation gene expression (**C. Sapienza**); Oncogene structure and function (**M. Park**); Transcriptional regulation (**A. Nepveu**); Clinical biology of tumor aggression (**A. Koufos**). Appointments carry competitive salaries, benefits, and relocation allowances. Written applications including complete curriculum vitae and names of three referees should be made to the relevant staff member at: **Ludwig Institute for Cancer Research, Royal Victoria Hospital, 687 Pine Avenue West, Montreal, Quebec H3A 1A1 Canada.**

### POSTDOCTORAL IN NEUROSCIENCE

Postdoctoral fellow to conduct research on biochemical interrelationships of brain biogenic amines and neuropeptides. Special consideration will be given to individuals with training in molecular biology who wish to complement their skills with neurochemical techniques for the study of transmitter interactions. Send curriculum vitae and names and addresses of three references to: **Dr. James W. Gibb, Department of Pharmacology and Toxicology, University of Utah, Salt Lake City, UT 84112.** *An Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION** immediately available in tumor immunology. Work focuses on the characterization of tumor infiltrating lymphocytes (TIL). Project involves defining the functional properties and growth requirements of various subsets of TIL including their antitumor activity. Applicant should have a strong background in immunology and be familiar with cell separation and T-cell cloning techniques. Individual will also oversee the daily operation of an adoptive immunotherapy laboratory that will test TIL clinically. Funding is for 3 years. Send curriculum vitae and names of references to: **James H. Finke, Ph.D., Department of Immunology and Cancer, Research Institute, Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44106.**

# OPPORTUNITIES IN EUROPE FOR Ph.D. LIFE SCIENTISTS

**Procter & Gamble** is a multinational, technically-based corporation with \$17 billion in sales in the pharmaceutical, health care, paper, beauty care, household care, beverage, food, detergent, and fabric care consumer product categories. Our sales more than doubled in the last 10 years, and we now have 83 consumer brands in 38 different product categories, with sales in 140 countries.

We now have several entry-level openings for Ph.D. life scientists in the following disciplines:

Biochemistry  
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Microbiology  
Immunology  
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These positions are in our technical centers in Brussels (Belgium), Egham (England), Newcastle-upon-Tyne (England), or Schwalbach (Germany, Frankfurt area). Applicants must be citizens of a European Common Market country. Languages preferred are French, German, or Italian, plus English as the primary language. Postdoctoral training is not required.

Besides offering a stimulating environment for personal and professional growth, we provide a highly competitive employment package including paid relocation, health and pension benefits.

To learn more about these opportunities, send your resume and publication list to:

Dr. T. J. Logan, Manager  
Ph.D. Recruiting  
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The Procter & Gamble Company  
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P.O. Box 398707  
Cincinnati, Ohio 45239-8707

Allow 6-8 weeks for response.  
No agency referrals, please.

## Senior Scientists

### Our Investment In Pharmaceutical Research and Development Continues to Grow.

At CIBA-GEIGY, a leading international pharmaceuticals company, we continue to make a significant investment in Research and Development. We're proud of the results we achieve. Currently, we seek the following qualified scientists to join our Pharmaceuticals Division in Summit, New Jersey.

#### **Dosage Form Development (Dept. 146)**

In this entry-level Ph.D. position, you will develop and characterize formulations of new chemical entities using sophisticated instrumental granulation, tableting, and encapsulation equipment. In addition, you will design and implement instrumental equipment and characterization techniques. A Ph.D. in Industrial Pharmacy including training on instrumented granulation and tableting equipment is required.

#### **Formulations (Dept. 182)**

You will be working in the development and preparation of stability and clinical batches for formulations including ophthalmics, parenterals, liquids and semi-solids. You will perform process scale-up and

validation and provide technical support for marketed products. A Ph.D. in Pharmacy or a related field, and 2-5 years' relevant industry experience are required.

#### **Biopharmaceutics (Dept. 165)**

Supervising our Biopharmaceutics Release Rate Laboratories, you will develop suitable dissolution methodology and assay procedures, evaluate release and aid in the interpretation of dissolution results; and provide leadership and training to subordinates for analytical methodology, instrument computerization, automation and maintenance areas. You'll need a Ph.D. in Analytical Chemistry or Pharmaceuticals Analysis, plus 2-5 years' Analytical Chemistry experience.

CIBA-GEIGY offers competitive salaries and comprehensive benefits. For immediate consideration, please forward your resume, with salary history and requirements, indicating appropriate department number, to: Ms. Jane Mulligan, The Pharmaceuticals Division, CIBA-GEIGY Corporation, 556 Morris Avenue, Summit, NJ 07901. We are an equal opportunity employer m/f/h/v.

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# CIBA-GEIGY



# Peptide Biophysical Chemist

The Physical and Structural Chemistry Department of Smith Kline & French Laboratories is seeking an Associate Senior Investigator to conduct research on the biophysical chemistry of peptides in an active and well equipped research group. We require an experiment-oriented chemist or biochemist who can apply nuclear magnetic resonance and other experimental physicochemical techniques, as well as computer-assisted molecular modeling, to problems in identifying biologically active conformations of peptides and peptide mimetics.

Applicants should have a background in physicochemical approaches to peptide conformation, including but not limited to familiarity with nuclear magnetic resonance. A Ph.D. in Organic, Physical or Biochemistry with 1-3 years of postdoctoral experience, a published record of accomplishment and excellent communication skills are necessary for this position.

We offer an excellent compensation and benefits package and an attractive relocation policy as well as a work environment that offers considerable opportunity for personal and professional growth. For confidential consideration, send your C.V. and names of three references to Robert F. Obst, R0088, Smith Kline & French Laboratories, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.

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## IMMUNOLOGY TRAINING PROGRAM POSTDOCTORAL FELLOWSHIPS

Postdoctoral positions are available within the Department of Microbiology and Immunology at Duke University Medical Center, supported by NIH Institutional Training Grants. Some of the research interests of the 38 faculty members are:

**D. Bernard Amos:** Immunologic recognition of human and murine histocompatibility antigens of tumors and allografts; HLA polymorphisms

**Yair Argon:** B cell differentiation and the control of antibody secretion

**Andrew Balber:** Regulation and function of African trypanosome surface glycoproteins

**R. Randal Bollinger:** Transplantation immunology, induction of immunological tolerance

**Rebecca H. Buckley:** Human T and B cell development and aberrations in their development and regulation

**Mary Carrington:** Regulation of HLA class II gene expression

**Ronald B. Corley:** Gene expression in differentiating B lymphocytes and B cell subsets; function(s) of class II molecules in B lymphocyte activation

**Frances E. Ward:** Human histocompatibility genes, polymorphism and regulation of expression

**Peter Cresswell:** Biosynthesis and genetic regulation of the glycoprotein HLA antigens

**Jeffrey R. Dawson:** Role of NK cells in regulating lymphocyte differentiation and function

**Olja Finn:** T-cell repertoire in human anti-allograft and anti-tumor responses

**Barton F. Haynes:** Human T cell biology, thymic microenvironment-thymocyte interactions and human T lymphotropic retroviruses

**Donna Kostyu:** Human MHC genes, definition and participation in immune responses

**Elwood Linney:** Gene expression in mouse teratocarcinoma

**Richard Metzgar:** Basic and clinical studies of membrane associated antigens of normal and malignant human and simian cells

Send curriculum vitae with a description of research interests and goals, names of references, and indicate faculty member(s) of interest to: **Dr. Frances E. Ward, Postdoctoral Coordinator, Box 3010, Duke University Medical Center, Durham, North Carolina 27710.**

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## FOREST BIOTECHNOLOGY AND REGENERATION UNIVERSITY OF VICTORIA VICTORIA, BRITISH COLUMBIA, CANADA

The research and graduate program in Forest Biology, specializing in Forest Biotechnology and Regeneration, is being expanded. We are seeking a tenure-track appointment in each of the following areas:

### TREE PHYSIOLOGY TISSUE CULTURE MOLECULAR BIOLOGY PLANT BIOCHEMISTRY

Two of these positions will be filled in each of 1987-88 and 1988-89. Appointees will contribute to undergraduate teaching in the Departments of Biology or Biochemistry/Microbiology and graduate teaching in Forest Biology. Appointees will be expected to seek research funding and develop an active research program, supervise graduate students and coordinate graduate courses to which adjunct professors from the Canadian Forest Service Pacific Forestry Centre and the B.C. Ministry of Forests Research Branch will contribute.

The University of Victoria has approximately 9000 undergraduate and 1000 graduate students and a faculty of 500. The Division of Science, within the Faculty of Arts and Science, offers degrees in Biology, Biochemistry, Chemistry, Microbiology, Physics, Mathematics and Computer Science.

Appointments will be made at the assistant or associate professor levels with one senior Lansdowne Professor in one of the above-mentioned areas. Salaries to be negotiated.

Canadian Immigration regulations require the University to assess applications from Canadian citizens and permanent residents of Canada before assessing applications from other persons.

Applications, including full Curriculum Vitae and the names of three referees, will be accepted until **October 31, 1987** and should be submitted to **Dr. Alastair T. Matheson**, Dean of Science, Faculty of Arts and Science, University of Victoria, P.O. Box 1700, Victoria, B.C., V8W 2Y2, Canada.

*The University of Victoria offers equal employment opportunities to qualified male and female applicants.*

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UNIVERSITY OF VICTORIA

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# **PRESIDENT**

## **SANDOZ RESEARCH INSTITUTE**

As part of Sandoz' commitment to build excellence in their Pharmaceutical Research worldwide, the Sandoz Pharmaceuticals Corporation in the U.S.A. has an opportunity for a President of the Sandoz Research Institute at East Hanover. We seek a candidate with the ability to effectively direct the scientific, administrative, regulatory and human resources aspects of the Pharmaceuticals business, as well as leadership abilities for attracting and motivating top quality research scientists.

The President of the Research Institute will be responsible for all Pharmaceutical Research and Development activities involved in the drug discovery and development process. This includes the overall direction, planning and coordination of the following functions: Preclinical Research, Drug Safety and Metabolism, Clinical Research, Pharmaceutical Development and Drug Registration and Regulatory Affairs. The Research Institute has a staff of approximately 600.

This position will also involve frequent and strategic interaction with Pharmaceutical Marketing Management and Sandoz International R&D Management and staff members.

Candidates for this position must possess demonstrated expertise in the following areas:

- *Scientific/Technical:* M.D. or Ph.D. in the biological sciences. Prefer expertise in molecular biology, medicinal chemistry or genetics. Significant experience in the generation, direction and implementation of Pharmaceutical Research and Development programs. Good understanding of the multinational drug industry.
- *Problem Solving/Innovation:* Understanding of future therapy and technology as they relate to Sandoz' current and future competitive position. Demonstrated success in the formulation and implementation of new ideas.
- *Communications:* Excellent communication skills for effective interaction with internal and external sources (i.e., FDA officials, outside scientific experts, internal scientific and management personnel). Understanding of international aspects of the position and ability to function as an integrating member of the Group R&D Management in Sandoz Ltd., as well as upper Management in East Hanover, NJ.

*Principals Only by Resume to:*

**John F. McGough**

Corporate Vice President, Human Resources  
Sandoz Corporation  
608 Fifth Avenue  
New York, New York 10020

## POSITIONS OPEN

**POSTDOCTORAL POSITION:** Vapor Uptake and Disposition. Immediate opening for recent (36 months) Ph.D. in biochemistry, chemistry, pharmacology, physiology, toxicology, or related field to play key role investigating how chemical and physical properties of inhaled vapors influence their uptake and biological fate in lab animals. Stipend: \$20,000 per year plus relocation allowance and health insurance. U.S. citizen or permanent residency. **Personnel Unit, Lovelace Inhalation Toxicology Research Institute, P.O. Box 5890, Albuquerque, NM 87185. Telephone: 505-844-9431. Equal Opportunity Employer.**

### POSTDOCTORAL POSITION

Ph.D. in molecular biology or microbiology with a competency in recombinant DNA techniques to study gene expression. Research involves cloning of fragments of DNA of mycobacteria in *E. coli* and evaluation of proteins produced. Salary range \$24,000 to \$28,000. Send curriculum vitae and three references to: **Dr. C. O. Thoen, College of Veterinary Medicine, Iowa State University, Ames, IA 50011.**

**POSTDOCTORAL POSITION**—Available immediately for investigations on cell growth control, ion fluxes, and membrane biochemistry. Experience in mammalian cell culture, growth factors, ion fluxes, and/or protein purification is desirable. Salary and benefits at nationally competitive levels. Interested candidates should send curriculum vitae to:

**Dr. Terry C. Johnson**  
Professor and Director  
Division of Biology  
Ackert Hall  
Kansas State University  
Manhattan, KS 66506

*Kansas State University is an Equal Opportunity/Affirmative Action Employer.*

### POSTDOCTORAL POSITION

Applications are invited from scientists with molecular biology training for a position to investigate the molecular genetics of the *R* locus in maize. Studies will include the structural characterization of *R* alleles derived by interchromosomal and intrachromosomal recombination and the use of transposon for in vivo gene mutagenesis to study tissue-specific gene expression. Applications should be made to: **Dr. Stephen Dellaporta, Yale University, Department of Biology, P.O. Box 6666, New Haven, CT 06511. An Equal Opportunity/Affirmative Action Employer. M/F.**

**POSTDOCTORAL POSITION** to study the control of differentiation in normal human keratinocyte progenitor cells and murine mesenchymal stem cells, and the mechanisms by which differentiation-dependent processes prevent neoplastic transformation by induction of anticancer/cancer suppressor activity. The following references serve as the basis for these studies: Scott and Maercklein, *PNAS* **82**, 2995 (1985); Wille and Scott, *Int. J. Cancer* **37**, 875 (1986); Wier and Scott, *J. Cell Biol.* **102**, 1955 (1986); Wille, Pittelkow, Shipley and Scott, *J. Cell Physiol.* **121**, 31 (1984). Position requires experience in cell biology and cell culture; expertise in molecular biology and/or protein chemistry also is highly desirable. Available in late 1987 or early 1988. Send curriculum vitae and three letters of recommendation to: **Robert E. Scott, M.D., Head, Section of Experimental Pathology, Mayo Clinic/Foundation, Rochester, MN 55905. An Equal Opportunity/Affirmative Action Institution.**

**POSTDOCTORAL MOLECULAR BIOLOGIST/IMMUNOLOGIST.** We invite applications from recent Ph.D. graduates with background in immunoassay, gels, cloning, DNA sequencing, blotting, etc. to work in private NIH-funded laboratory near Memphis, Tennessee. Position available for 1 to 3 years. Excellent working conditions. Joint academic appointment likely. Salary range \$23,000 to \$26,000. Send curriculum vitae and letters of recommendation to: **Dr. Stephen Wachtel, Center for Reproductive Biology, 380 South Collierville-Arlington Road, Collierville, TN 38017.**

## POSITIONS OPEN

**POSTDOCTORAL POSITION** available immediately in a laboratory using molecular genetic, cell biological, and biochemical methods to study nuclear transport of ribosomal proteins, regulation of ribosomal protein genes, and nuclear export of ribosomal subunits in eukaryotic cells. Projects in all areas open to prospective candidate. Experience in yeast molecular biology or cell biological techniques desired but not essential. Send résumé and list of references to: **Dr. Howard Fried, Department of Biochemistry, School of Medicine, University of North Carolina, Chapel Hill, NC 27514. An Affirmative Action/Equal Opportunity Employer.**

### POSTDOCTORAL POSITION

Available immediately, for computer studies of protein structure and folding. Applicant should have strong background in biophysical chemistry and computer programming. Starting salary \$18,000. Send curriculum vitae, statement of research interests, and names of three references to: **Dr. George Rose, Department of Biological Chemistry, The Milton S. Eshelby Medical Center, The Pennsylvania State University, Hershey, PA 17033. An Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION.** Protein chemist for research in glucose-protein interactions and peptide synthesis. Successful candidate will have assistance of technician and graduate student and will have use of a peptide synthesizer, FAB/MS/MS and HPLC/MS. Send curriculum vitae and names and addresses of three references to: **Dr. Joseph Rosen, Department of Food Science, P.O. Box 231, Rutgers University, New Brunswick, NJ 08903. An Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION** available for a recent graduate with a Ph.D. in an area of oculomotor-vision research. Candidates with a background in motion perception who want experience in an established human oculomotor research laboratory are encouraged to apply. This is a Stanford University position located at the Santa Clara Valley Medical Center, where the graduate would work with an M.D. neurologist and Ph.D. biomedical engineer. Send résumé and three letters of recommendation to: **John R. Hotson, M.D., Department of Neurology, Santa Clara Valley Medical Center, 751 South Bascom Avenue, San Jose, CA 95128. Stanford University is an Equal Opportunity Employer.**

**Risk Communication and Management: POSTDOCTORAL POSITION** to work with a research team pursuing experimental studies in risk communication and public understanding. Require familiarity with the literature in risk perception. Would like background in experimental psychology and/or experience in radon, solar UV, dam safety, 60-Hz fields, auto safety, carcinogenic chemicals or similar technical risks. Send résumé and selected papers to: **M. Granger Morgan, Head, Department of Engineering and Public Policy, Carnegie Mellon University, Pittsburgh, PA 15213.**

A **POSTDOCTORAL POSITION** is available immediately for a Ph.D. biochemist/molecular biologist to participate in studies of gene regulation by steroid receptors. Projects include the purification, characterization, and cloning of human estrogen and progesterone receptors, transfection studies, mutagenic analyses, and preparation of monoclonal antibodies. Experience with steroid receptors, protein purification and analysis, monoclonal antibody production and/or recombinant DNA techniques is desired. Salary is negotiable. Send curriculum vitae and three letters of reference to: **Dr. Geoffrey L. Greene, The University of Chicago, Ben May Institute—Box 424, 5841 South Maryland Avenue, Chicago, IL 60637.**

**POSTDOCTORAL POSITION (M.D. or Ph.D.)** available 1 September 1987 for research training in gastrointestinal/hepatobiliary physiology. Opportunities in biliary physiology, peptic ulcer pathogenesis, immune mechanisms in intestinal disease, collagen metabolism, hepatic gene regulation, intestinal electrolyte transport, stimulus/secretion of pancreatic acinar cells. NIH funded laboratories. U.S. citizenship or permanent resident status required; salary by NIH guidelines. Send curriculum vitae and publications, three letters of recommendation to: **Alan F. Hofmann, T-013, University of California, San Diego, La Jolla, CA 92093.**

## POSITIONS OPEN

**POSTDOCTORAL POSITION** in Colorado available immediately to study hormonal regulation of lipoprotein lipase gene expression in adipocytes and CNS. A background in molecular biology and/or protein biochemistry is required. Send curriculum vitae and names of three references to: **Dr. Robert H. Eckel, Division of Endocrinology, University of Colorado Health Sciences Center, Denver, CO 80262. Equal Opportunity Employer.**

**POSTDOCTORAL POSITION IN MOLECULAR BIOLOGY AND IMMUNOLOGY.** A postdoctoral position is available in molecular biology at the Center for Neurologic Diseases of the Brigham and Women's Hospital, Harvard Medical School, to study T-cell receptor genes in inflammatory central nervous system diseases. Candidates should have a Ph.D. or equivalent, with experience in molecular biology and/or immunology. Send curriculum vitae and names of three references to: **Dr. David Hafler, Center for Neurologic Diseases, Brigham and Women's Hospital, Harvard Medical School, Thorn Research Building, 75 Francis Street, Boston, MA 02115. An Equal Opportunity Employer.**

### POSTDOCTORAL POSITION IN MOLECULAR GENETICS

Howard Hughes Medical Institute at the University of Michigan Medical School: Our laboratory is interested in the molecular genetics of several clotting proteins [*Science* **228**, 1401-1406 (1985); *Journal of Clinical Investigation* **78**, 1673-1680 (1986)]. Current projects involve (i) RFLPs and genetic linkage analysis, (ii) molecular structure/function studies, and (iii) the analysis of molecular mechanisms for control of gene expression in endothelial cells. Please send a description of research interests, curriculum vitae, and names and telephone numbers of three references to: **Dr. David Ginsburg, MSRB I, Room 4520, University of Michigan Medical Center, Ann Arbor, MI 48109. Equal Opportunity Employer.**

**POSTDOCTORAL POSITION—NEUROSCIENCES**—available to study the role of GABA and other neurotransmitters in the regulation of blood pressure by the brain. Studies encompass neurochemical, pharmacologic, and neuroanatomic approaches. Send curriculum vitae and names of three references to: **Dr. Alan Sved, Department of Behavioral Neuroscience, University of Pittsburgh, Pittsburgh, PA 15260.**

### POSTDOCTORAL POSITION IN HORMONE RECEPTOR MOLECULAR BIOLOGY

Isolation of parathyroid hormone receptors, cloning cDNA's, isolation and sequencing receptor gene. Immediate opening for beginning postdoctoral candidates. Excellent salary and fringe benefits. Stimulating intellectual environment in a basic science department. Call or apply directly to: **J. E. Zull, Department of Biology, Case Western Reserve University (CWRU), Cleveland, OH 44106, 216-368-3572. CWRU is an Equal Opportunity/Affirmative Action Employer.**

### POSTDOCTORAL POSITION IN CELL BIOLOGY

A position is available immediately to study the structure and function of the actin-binding proteins, gelsolin and caldesmon, using protein biochemical and recombinant DNA techniques. Experience in protein chemistry or molecular biology is required. Send curriculum vitae and three references to: **Joseph Bryan, Department of Cell Biology, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030.**

### POSTDOCTORAL POSITION—IMMUNOLOGY

Available immediately to join group investigating (i) the immunochemistry of monoclonal antibodies which define several antigenic systems in human sarcomas, (ii) the development of immuno-conjugates for chemotherapy. Experience in protein purification and monoclonal antibody production preferred. Send curriculum vitae and names of three references to: **Craig W. Beattie, Ph.D., Division of Surgical Oncology, University of Illinois College of Medicine, 840 South Wood Street, Chicago, IL 60612.**

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**International Crops Research  
Institute For the Semi-Arid Tropics  
needs a**

**MICROCLIMATOLOGIST  
at Hyderabad, India**

The Microclimatologist will be responsible for initiating experimental work on the relation between the microclimate of crop stands and the spread of fungal diseases which attack cereals and legumes in the semi-arid tropics. The program of work will include laboratory studies of pathogen development in controlled environments, field measurement of microclimate, and monitoring of spore distributions. The main objectives of the work will be to understand the mechanism which links outbreaks of disease to weather as a basis for more effective forecasting and the implementation of controls. The Microclimatologist will work closely with pathologists in ICRISAT's Cereals and Legumes Programs, and with national scientists.

**Essential qualifications:**

Doctorate in appropriate aspects of environmental physics or crop science. Ability to work with national and international scientists from a range of disciplines, and good command of English. Field experience with techniques of spore capture and counting. Familiarity with microprocessor systems of environmental control. The position is for 2 years with possibility of extension. Salary at principal staff level, according to qualifications and experience. The appointee will be based at the ICRISAT Center, Patancheru, 30 km NW of Hyderabad, India. Hyderabad is accessible by air to international airports and has good living conditions, recreational, and medical facilities. Educational facilities exist for children to the age of twelve.

and an

**AGRONOMIST/  
PLANT BREEDER**

**at Nairobi, Kenya**

The Agronomist/Plant Breeder will be a member of an East African Sorghum and Millet Research Network involved in technology transfer and improvement of sorghum, pearl millet, and pigeon pea. The scientist will be responsible for sorghum and millet research, screen breeding lines and cultivars from all ICRISAT programs, develop cooperative research projects with the National Agricultural Research Services of cooperating countries in the region, and assist in fitting selected cultivars into accepted cropping systems of the region.

**Essential qualifications:**

Ph.D. with thesis research on Genetics and Plant Breeding with at least five years field research experience. Willingness to travel frequently and conduct research in the sorghum areas of Eastern Africa. Understanding problems relating to tropical cereals with particular reference to drought and cold tolerance, including nutrient stress.

This is a contract position with initial 2-year appointment. Salary at principal staff level, according to qualifications and experience. The appointee will be based at the ICRISAT Center, Nairobi.

Send resume, including present salary level, and names of three references to:

**Director General  
ICRISAT Patancheru P.O.  
A.P. 502 324, India**

within 30 days from the date of the advertisement.

# Cardiovascular Pharmacology Research

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HEIGHTENED GROWTH IN BASIC RESEARCH ACTIVITIES is heralding a new era of accomplishment at our pharmaceutical research facility in Wallingford, Connecticut. Our proud record of achievement in cardiovascular research is certain to continue into the 21st century. Immediate positions in Cardiovascular Pharmacology are available for individuals with a PhD, MS or BS in Pharmacology, Biology, Physiology, Biochemistry or a related discipline. Practical laboratory experience is essential.

### ISOLATED TISSUE PHARMACOLOGY

Experience with *in vitro* smooth muscle, cardiac muscle and/or isolated perfused heart laboratory techniques is required. Interest in the implementation of methodology for cell membrane ion movements, as well as for the electrophysiology of excitable tissues is essential.

### IN VIVO CARDIOVASCULAR PHARMACOLOGY

These positions call for hands-on knowledge of the methodologies associated with cardiovascular drug evaluation in *in vivo* models, including expertise in one of the following: hemodynamics, myocardial function, electrocardiography, or O<sub>2</sub> and CO<sub>2</sub> transport. Proficiency in surgery, computers and statistics is highly desirable.

### CELL CULTURE BIOLOGY

Candidates should be well-versed in mammalian cell culture systems and culture technologies, and maintenance of cell lines in long-term culture. Experience with cardiac myocytes, endothelium and vascular smooth muscle cell culture systems would be extremely helpful, as would a working knowledge of radioisotopes and radioimmunoassay.

### RADIOLIGAND BINDING

Demonstrated ability required in membrane or cytosolic receptor/ligand binding methods for drug receptor classification. Expertise in drug-receptor kinetics, isotopes, radioimmunoassay, analytical/preparative biochemistry would be a definite advantage.

### ANTI-THROMBOTIC

PhD Biochemist with training in anti-thrombotic research to work as part of a drug discovery team in identifying agents for the treatment of arterial and venous thrombosis.

BRISTOL-MYERS careers offer the advantages of sustained growth, highly competitive salaries and extensive benefits in a multidisciplinary environment designed to foster corporate and personal success. Our countryside location is convenient to New Haven and Hartford, Connecticut, New York City and New England.

TO FIND OUT MORE, send resume with salary history, noting area of interest, to: **BRISTOL-MYERS COMPANY, Pharmaceutical Research & Development Division, Attn: ATZ3, P.O. Box 5100, 5 Research Parkway, Wallingford, CT 06492.**

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# Bristol-Myers

## POSITIONS OPEN

**POSTDOCTORAL POSITION** available immediately to study new members of the *erbA*-thyroid hormone receptor gene family and their mechanism of gene regulation. Competence in DNA technology is required and experience in tissue culture techniques is desirable. Salary is negotiable. The La Jolla Cancer Research Foundation is a growing basic Cancer Research Center located in the biomedical and research center of San Diego within walking distance of UCSD, the Salk Institute, and Scripps Clinic. Please send curriculum vitae with names of three references to: **Dr. Magnus Pfahl, La Jolla Cancer Research Foundation, 10901 North Torrey Pines Road, La Jolla, CA 92037. An Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION** available immediately for 2 to 3 years, to study the splicing of mRNA precursors. Projects include purification and characterization of factors from mammalian cells, mapping of RNA-factor interactions and study of alternative splicing in vitro. Experience in molecular biology, biochemistry, or cell culture desirable. Recent Ph.D. preferred. Send curriculum vitae, statement of research experience, and names, addresses and telephone numbers of three references to: **Dr. Richard Padgett, Department of Biochemistry, University of Texas Health Science Center Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235. Equal Opportunity Employer.**

**POSTDOCTORAL POSITION** available early 1988 for a graduate with experience in cell or molecular biology to study molecular biology of DNA repair and mutagenesis as it relates to the action of anti-cancer platinum complexes. Send curriculum vitae, transcripts, names, and telephone numbers of three references to: **Dr. Alan Eastman, Eppley Institute for Research in Cancer, University of Nebraska Medical Center, Omaha, NE 68105.**

**POSTDOCTORAL POSITION** available immediately to study the biochemistry of a gene regulatory protein, the *Ab* receptor. Studies will focus on the interaction of this protein with toxic ligands such as 2,3,7,8-tetrachlorodibenzo-*p*-dioxin, the transformation of the ligand-receptor complex to a DNA binding state, the biochemical properties of the various forms of the receptor, and its interaction with the mammalian genome. Reply with curriculum vitae and three letters of recommendation to: **Dr. T. A. Gasiewicz, Environmental Health Sciences Center, University of Rochester Medical Center, Rochester, NY 14642. The University of Rochester is an Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION:** Developmental aspects of vitamin D-dependent calcium binding protein expression in human and murine tissues. Techniques include tissue culture, cDNA probes and monoclonal antibodies. Background in cell and molecular biology needed. Send curriculum vitae and three references to: **M. Elizabeth Bruns, Ph.D., Box 214, Department of Pathology, University of Virginia Medical School, Charlottesville, VA 22908. Equal Opportunity/Affirmative Action Employer.**

### POSTDOCTORAL POSITION

Available immediately to study initiation of chromosomal DNA replication in animal cells. Research involves gene transfer, DNA cloning and sequencing, and protein-DNA interactions. Applicants should have experience in nucleic acid biochemistry and/or molecular genetics. Salary commensurate with NIH guidelines. Send curriculum vitae and list of references to: **Dr. Nicholas Heintz, Department of Pathology, University of Vermont, College of Medicine, Burlington, VT 05405.**

### POSTDOCTORAL POSITION IN COCHLEAR AND AUDITORY-NERVE PHYSIOLOGY

Available immediately to study the relationship between cochlear afferent activity and the vibrations of the basilar membrane. Send curriculum vitae, and the names of three references to: **Dr. Mario A. Ruggero, Department of Otolaryngology, University of Minnesota, 2630 University Avenue S.E., Minneapolis, MN 55414. The University of Minnesota is an Equal Opportunity Educator and Employer, and specifically invites and encourages applications from women and minorities.**

## AUSTRALIA

## CSIRO

### RESEARCH FELLOW (CLOUD MICROPHYSICIST)

A\$28,629-A\$41,861

DIVISION OF ATMOSPHERIC RESEARCH  
ASPENDALE VIC

**THE DIVISION:** The Division of Atmospheric Research has a staff of 130 including 70 professional scientists and undertakes research into physical and chemical aspects of atmospheric phenomena and related areas. The Division is contracted to provide scientific direction for a 5 year precipitation enhancement experiment soon to be commenced in southern Australia. A cloud microphysicist is required as a member of the team providing this scientific direction.

**DUTIES:** In collaboration with senior scientists, to undertake research into microphysical properties of cloud characteristics with the overall aim of assessing natural precipitation processes and the suitability of the clouds for seeding to increase precipitation. To engage in field studies of clouds with the instrumented CSIRO F-27 aircraft available to the Division, and to participate in the analysis and interpretation of the data collected. To work closely with other scientists to increase the overall understanding of the cloud system on the regional-scale, on the mesoscale, and on the microscale.

**QUALIFICATIONS:** A Ph.D. degree or equivalent qualification in atmospheric science or related field. Willingness to engage in field oriented research into the microphysical characteristics of clouds using instrumented aircraft. Familiarity with the practices of precipitation enhancement experiments would be an advantage.

**CONDITIONS:** The appointment will be for a term of 5 years with the possibility of a further term. Australian Government Superannuation benefits are available.

**MORE INFORMATION:** Prospective applicants are invited to telephone Dr. Alex Long (03) 586 7666 for further information. Dr. Long can also provide a copy of the detailed job description and selection criteria.

**APPLICATIONS:** Applications should be submitted by 2 October 1987 and quote reference number M7845. They should be framed against the selection criteria, and should state relevant personal particulars including details of qualifications and experience. At least two professional referees should be nominated. Applications should be addressed to:

The Chief,  
CSIRO Division of Atmospheric Research,  
Private Bag 1,  
MORDIALLOC, Vic. 3195, AUSTRALIA



## The University of British Columbia

### Biotechnology Laboratory

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

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

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

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

Additional positions will be advertised at a later date.

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

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



# MERRELL DOW RESEARCH INSTITUTE

## Strasbourg Center

has the following opportunities

### Pharmacologist (Réf. ER 1)

The successful candidate will have several years postdoctoral experience and a record of achievement in independent creative research. Practical expertise in the area of receptor pharmacology is essential. Experience in using state-of-the-art computer imaging techniques and equipment is desirable, particularly in imaging as it relates to receptors.

### Physical Organic Chemist or Biochemist (Réf. ER 2)

We invite applications from Senior Scientists having a Ph. D. in Physical Organic Chemistry or Biochemistry and 1 or 2 years postdoctoral experience in the application of modern NMR methods to peptide and/or protein structure determination. Experience in other spectroscopic and physical methods applied to protein structure determination is an asset. Knowledge in chemical and mathematical modeling is desirable. Merrell Dow has excellent NMR, graphics and computing facilities.

### Postdoctoral Scientists (Réf. ER 3)

Positions are also available for scientists with experience in cardiovascular and CNS pharmacology, protein biochemistry, molecular biology, and immunology.

Our Research Center is located in Strasbourg, France, the crossroads of Europe. With its excellent University, beautiful Cathedral and lovely setting on the Rhine, Strasbourg is a particularly inviting place to live.

Salary and conditions of employment are commensurate with the importance of these positions and the experience of the appointees.

Please send CV + the names of 3 referees to M.-J. BILDSTEIN - Employee Relations Department - Merrell Dow Research Institute, 16, rue d'Ankara, 67084 STRASBOURG CEDEX, FRANCE.

## Associate Director Human Pharmacokinetics

The Drug Metabolism Research Unit of the Pharmaceutical Research and Development Division of the Upjohn Company is seeking a qualified scientist to lead and manage a laboratory-based human pharmacokinetics section. The successful candidate would be responsible for supervising scientists and research associates in the design and implementation of clinical studies to measure pharmacokinetic and biopharmaceutic properties of investigational drugs in normal subjects, patients and other special study populations, and the evaluation and reporting of the pharmacokinetic/pharmacodynamic data obtained, in collaboration with other scientist and physician researchers. In addition, the candidate will coordinate and direct a fundamental intramural research program, supervise ex-

ternal contract research activities, review potential acquisition projects, prepare regulatory submissions and participate in unit budgeting and staffing plans.

The successful candidate should possess a Ph.D. or M.D. degree with relevant training in pharmaceutical sciences or clinical pharmacology and demonstrated experience in clinical pharmacokinetics/biopharmaceutics. Familiarity with biostatistics and modern bioanalytical method is required, along with excellent interpersonal, organizational, and communication skills, and the ability to effectively lead a scientific goal-oriented group.

Kalamazoo is a medium-sized Southwestern Michigan community with immediate access to a mix of excellent cultural, educational and recreational pursuits, including numerous lakes and a four-season climate. Upjohn offers an excellent salary, commensurate with experience and an outstanding benefits program. For confidential consideration, please call toll free 1/800/253-8600, ext. 3-6767, (inside Michigan, call collect 616/323-6767) to request an employment application be sent to you. Please refer to Ad Number 21751-F when calling.

# Upjohn

**Our commitment to scientific excellence continues...**

An Equal Opportunity Employer M/F

## POSITIONS OPEN

### POSTDOCTORAL POSITION— CARCINOGENESIS

Multiyear position available September 1987 in a group using cell and molecular biologic approaches to characterize O<sup>6</sup>-ethylguanine transmethylease in rat mammary gland. Experience in protein purification and monoclonal antibody production or recombinant DNA techniques preferred. Send curriculum vitae and names of three references to: **Craig W. Beattie, Ph.D., Division of Surgical Oncology, University of Illinois College of Medicine, 840 South Wood Street, Chicago, IL 60612.**

*The University of Illinois is an Equal Opportunity Employer/Affirmative Action Employer*

### POSTDOCTORAL POSITIONS

The Department of Pathology, Yale University School of Medicine, invites applicants for postdoctoral positions available immediately in the following laboratories: **A. Bothwell**, Mechanisms of lymphoid-specific gene expression; **G. P. Dotto**, Molecular mechanisms of mouse skin carcinogenesis: an in vivo and in vitro model for oncogene interactions; **H. Furthmayr**, Biochemistry of extracellular matrix and its role in development, differentiation, and disease; **M. Haas**, Physiology and biochemistry of ion transport pathways; **M. Kashgarian**, Cell biology of ion transporting epithelia; **J. A. Madri**, Endothelial cell biology, cell-matrix interactions, and angiogenesis; **V. T. Marchesi**, Biochemistry and pathology of cell membranes; **J. S. Morrow**, Molecular aspects of cytoskeleton structure and function; **D. F. Stern**, Mechanisms of transformation by growth factor (EGF) and growth factor receptor (*neu/erbB-2*) oncogenes. Please send curriculum vitae to the appropriate faculty member at: **Department of Pathology, Yale University School of Medicine, 310 Cedar Street, P.O. Box 3333, New Haven, CT 06510.** *Yale University is an Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITIONS** in molecular virology involving synthetic DNA. Two positions available to develop: (1) novel antisense oligonucleotides as antiviral agents, and (2) new methods for viral gene amplification and detection. Virologic emphasis is directed, but not limited, to HIV and CMV. Send résumé and names of two references to: **J. A. Zaia, Division of Pediatrics (position #1); or J. J. Rossi, Department of Molecular Genetics (position #2); City of Hope, 1500 East Duarte Road, Duarte, CA 91010.**

**POSTDOCTORAL POSITIONS** are available to study the molecular basis of T lymphocyte activation and growth. Projects include analysis of the structure/function of interleukin 2 receptor subunits and the role of Ly-6 alloantigens in T cell activation. Prior experience in cell surface protein chemistry or recombinant DNA technology is preferred. Send curriculum vitae and names of three references to: **Dr. Thomas Malek, Department of Microbiology and Immunology (R138), University of Miami School of Medicine, Miami, FL 33101.**

### POSTDOCTORAL POSITIONS IN MOLECULAR BIOLOGY

Postdoctoral appointments with the following faculty members are available in the Department of Microbiology at The University of Texas at Austin:

**Henry R. Bose, Jr.**: Role of *V-rel* oncogene in the transformation of avian lymphoid cells.

**Charles F. Earhart**: Genetics and biochemistry of iron assimilation in bacteria.

**William R. Folk**: Role of enhancer binding proteins in stimulating transcription and DNA replication.

**Paul D. Gottlieb**: Structure, function and polymorphism of genes coding for mouse T-cell surface molecules and immunoglobulin light chains.

**Richard J. Meyer**: Mechanism of conjugal transfer of broad host-range plasmids.

**Ian J. Molineux**: Regulatory mechanisms of phage gene expression.

**James R. Walker**: DNA replication genes and proteins of *E. coli*: relation between DNA replication and the cell cycle.

Postdoctoral fellows will work within a community of energetic molecular biologists having active, well-funded research programs. The university campus is located in Austin, regarded as one of America's most livable cities. Interested individuals should write to the appropriate faculty member at: **The Department of Microbiology, ESB 226, University of Texas, Austin, TX 78712-1095.**

## POSITIONS OPEN

### POSTDOCTORAL POSITIONS: NEUROBIOLOGY

Postdoctoral training in research on nervous system regeneration. Experience in tissue culture, electron microscopy, immunocytochemistry, or protein analysis by gel electrophoresis or HPLC desirable. Available immediately. Must be U.S. citizen or permanent resident. Send curriculum vitae and names of reference(s) to: **Dr. Bernice Grafstein, Department of Physiology, Cornell University Medical College, New York, NY 10021.** *An Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITIONS IN BIOCHEMICAL PHARMACOLOGY** for recent Ph.D.'s interested in nucleoside transport in normal and neoplastic cells, or use of transport inhibitors to modulate antitumor drug activity. Positions available now and 1 February 1988. Salary \$22,000 to \$25,000. Send curriculum vitae and names of four references to: **Judith A. Belt, Ph.D., Department of Biochemical Pharmacology, St. Jude Children's Research Hospital, 332 North Lauderdale, P.O. Box 318, Memphis, TN 38101.** *An Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITIONS (TWO)** available immediately to study the effects of adriamycin on the level of peroxidation, the glutathione-dependent detoxifying system and the molecular events linked to multistage tumor promotion in mouse epidermis in vivo and in vitro. Strong background in biochemistry and chemical carcinogenesis as well as demonstrated ability to conduct independent research. Send résumé, publications, and three letters of reference to: **Dr. J. P. Perchellet, Division of Biology, Center for Basic Cancer Research, Ackert Hall, Kansas State University, Manhattan, KS 66506.** *KSU is an Equal Opportunity Employer.*

### JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE

**TWO POSTDOCTORAL POSITIONS: MOLECULAR BIOLOGIST AND CELLULAR IMMUNOLOGIST.** Ph.D. (or M.D. with research experience) to work on immunogenetics of human immune response to allergens. Molecular biologist must have solid background in rDNA technology, including DNA sequencing. Cellular immunologist should preferably have experience in T-cell cloning. Experience in protein purification/characterization advantageous for both positions. Demonstrated research creativity and publications essential. Send résumé, curriculum vitae, copies of at least two publications, and names of three or four referees to: **David G. Marsh, Ph.D., Johns Hopkins University School of Medicine, Good Samaritan Hospital, Baltimore, MD 21239.** *Affirmative Action/Equal Opportunity Employer.*

**TWO POSTDOCTORAL POSITIONS** available immediately: (i) Role of Viral Cofactors in Pathogenesis of AIDS: Primary goal is to characterize at the molecular level the interaction between HIV and herpesviral genomes in appropriate target cells. Secondary emphasis on evaluating the antiviral potential of naturally derived biological response modifiers. Previous experience in retrovirus research necessary. (ii) Cellular Gene Regulation by Transforming Herpesvirus: Project involves study of the structure and expression of specific cellular genes regulated abnormally in herpesvirus transformed cells. Prior experience in gene cloning and transcriptional analysis preferred. An opportunity to work in the scientifically stimulating San Francisco Bay Area. Send curriculum vitae with names of three references to: **Dr. Raxit Jariwalla, Head, Viral Carcinogenesis and Immunodeficiency Program, Linus Pauling Institute, 440 Page Mill Road, Palo Alto, CA 94306.**

**TWO POSTDOCTORAL POSITIONS** (NIH-funded) available immediately to participate in studies on either biochemistry or molecular biology of respiratory mucus glycoproteins. Recent Ph.D. with experience in protein chemistry, biophysical, immunological, and molecular biology techniques desirable. Salary range \$18,000 to \$22,000 per year. Applicants should send a letter of interest, curriculum vitae, and two letters of reference to: **Dr. G. P. Sachdev, College of Pharmacy, University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, OK 73190.**

## POSITIONS OPEN

**POSTDOCTORAL/RESEARCH ASSOCIATE POSITION.** Opportunity for Ph.D. with molecular biology/recombinant DNA experience to work on recently cloned mammalian brain serotonin receptor [PNAS 84, 4332 (1987)]. NIH funded position to study receptor structure/function relationships and coupling to second messenger systems. May evolve into faculty appointment. Send résumé and names of three references to: **Paul Hartig, Ph.D., Department of Environmental Health Sciences, Johns Hopkins Medical Institutions, 615 North Wolfe Street, Baltimore, MD 21205.**

**POSTDOCTORAL RESEARCH ASSOCIATE:** Biotechnology position exists in an ongoing program to investigate how activated carcinogens and toxicants alter gene expression in human cells. Our specific interest is to examine how carcinogens and toxicants alter the fate of transcriptionally active genes in human cells. A Ph.D. or an equivalent in either biochemistry, cellular, or molecular biology. Send curriculum vitae with a brief résumé of interest and three letters of reference to: **Dr. George E. Milo, The Ohio State University, Department of Physiological Chemistry, Comprehensive Cancer Center—Biotechnology Program, 122 Hamilton Hall, 1645 Neil Avenue, Columbus, OH 43210.**

**POSTDOCTORAL RESEARCH ASSOCIATE.** The Institute of Biological Chemistry, Washington State University, Pullman has a postdoctoral position available for a molecular biologist to investigate genetic mechanisms regulating chloroplast membrane and lipid biosynthesis in *Arabidopsis* [see *Science* 227, 763 (1985)]. Candidates should have demonstrated ability with recombinant DNA techniques. Salary commensurate with background and experience. Appointment renewable. Send curriculum vitae and three letters of reference to: **Dr. John Browne, DOE Plant Research Laboratory, Michigan State University, East Lansing, MI 48824-1312.** Telephone: 517-335-5197.

*Washington State University is an Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL RESEARCH ASSOCIATE/CHAOS AND TURBULENCE.** Research in theoretical and computational aspects of fluid mechanics and chaos, especially shear flows, and flows near walls. Background in dynamical systems desirable. Ph.D. in physics, applied mathematics, mechanical, chemical or aerospace engineering. Interest in computer graphics considered a plus. Salary commensurate with qualifications and experience. Deadline for application: 15 October 1987. Send résumé, reprints of published or submitted work, and three letters of reference to: **Professor J. M. Ottino, Department of Chemical Engineering, University of Massachusetts, Amherst, MA 01003.** *Affirmative Action/Equal Opportunity Employer.*

### PROFESSOR AND DIRECTOR CENTER FOR GENE RESEARCH AND BIOTECHNOLOGY OREGON STATE UNIVERSITY

The Center coordinates and promotes research in molecular biology and its applications. Fifty faculty members from ten departments are associated with the Center. The Director is responsible for broadening the financial support base, promoting communication, participating in faculty recruitment and evaluation, supervising the Center's laboratory facilities, and maintaining leadership in research. The position carries a tenured appointment as professor in a suitable department.

We seek a mature, creative scientist with the leadership ability to organize diverse research activities in a multi-departmental setting. The appointee must qualify for the rank of professor.

Applications should include a letter of interest, a current curriculum vitae, a description of current research objectives and support, and names and addresses of three or four professional references. Closing date for applications is 31 October 1987. Send applications, nominations, and inquiries to:

**CGRB Director Search Committee  
c/o Dr. Christopher K. Mathews  
Department of Biochemistry and Biophysics  
Oregon State University  
Corvallis, OR 97331**

*OSU is an Affirmative Action/Equal Opportunity Employer, and Complies with Section 504 of the Rehabilitation Act of 1973.*

## **SENIOR SCIENTIST IMMUNOLOGY/ PROTEIN CHEMISTRY**

The GIBCO/BRL Division of Life Technologies, Inc. is expanding its program in Immunology and Immuno-detection.

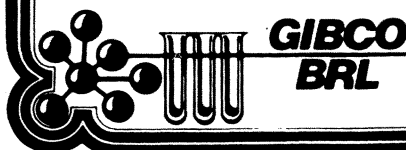
We are seeking a person with expertise and experience in Immunology and Protein Chemistry. The responsibilities of this position will include development of new Immunology and Immunodetection reagents as well as some protein purification and protein characterization. Self motivation, good communication skills, and a willingness to work in a multi-disciplinary environment will be critical for success in this position.

Our salary and benefits programs are highly competitive. Our location combines the scenic countryside of Maryland with the cultural vitality of Washington, D.C.

Candidates should send a resume including salary history and requirements to:

Mr. Richard L. Hotaling, Jr.  
*Personnel Manager*  
GIBCO/BRL, A Division of  
**Life Technologies, Inc.**  
Department BO 9/4/87  
8717 Grovemont Circle  
Gaithersburg, MD 20877

An equal opportunity employer, M/F/H/V



# POSTDOCTORAL POSITIONS



Hoffmann-La Roche, an established leader in the pharmaceutical and health care industry, has a number of post-doctoral positions available for creative individuals to carry out basic research in the Department of Pharmacology and Chemotherapy.

## DERMATOLOGY

You will be involved in the investigation of the mechanism of action of retinoids on the repair of photodamaged skin. In your studies, you will acquire recombinant DNA technology skills. A PhD in Biochemistry, Cell Biology or Pharmacology is required. Demonstrated abilities in cell and organ culture are desired, along with a working knowledge of the biochemistry and physiology of the skin. Position SS.

## INFLAMMATION

You will investigate the mechanism of action of novel anti-inflammatory retinoids in animal models of arthritis; and the effect of these retinoids on the mechanisms underlying the development of the adjuvant and collagen induced arthritis, using in vitro, cellular and molecular techniques to complement in vivo studies. You should have a PhD in Immunology, Pharmacology, Cell Biology or Biochemistry; experience with immunological techniques and cell culture is desired. Position JC.

## OBESITY/ APPETITE REGULATION

You will conduct behavioral and metabolic studies concerning the control of feeding with emphasis on central integration of peripheral signals. A PhD in Neuroscience, Physiology or Physiological Psychology is required; experience with circadian, metabolic and pharmacological studies of feeding is desired. Position AC.

## OBESITY/INSULIN SECRETION

You will conduct research on cellular and molecular mechanisms in the control of insulin secretion in experimental models of obesity. A PhD in Biochemistry and/or Physiology is required; experience with cultured pancreatic islets is preferred. Position AC.

These positions are 1 year appointments, renewable for a second year upon mutual agreement.

The Roche Research Center is located in a suburban setting 10 miles from New York City. Roche offers a very competitive compensation package and a research environment that encourages scientific growth. Interested individuals should send a curriculum vitae indicating past and current research interests, salary requirements, and position of interest, to: **Ms. R. Charamonte, Hoffmann-La Roche Inc., Nutley, New Jersey 07110.** We are an equal opportunity employer.



**Hoffmann-La Roche**

Working Today For A Healthier Tomorrow.

## POSITIONS OPEN

**POSTDOCTORAL RESEARCH ASSOCIATE** position available to study the role of polyphosphoinositides and their derived second messengers in receptor function in smooth muscle. Applicants should have a recent Ph.D. in biochemistry or pharmacology. Send curriculum vitae and names of three references to: **Dr. Ata Abdel-Latif, Department of Cell and Molecular Biology, Medical College of Georgia, Augusta, GA 30912-3331. An Equal Opportunity/Affirmative Action Employer.**

### U.S. ARMY MEDICAL RESEARCH INSTITUTE OF INFECTIOUS DISEASES (USAMRIID)

USAMRIID is a leading medical research facility engaged in the development of drugs and vaccines against militarily important diseases.

In anticipation of mission expansion, we are recruiting for the following competitive Federal Civil Service positions:

#### PROFESSIONAL RESEARCH:

GS-11/12—Salary range: \$32,567 to \$42,341 per annum

Research Biologists Physiologists  
Cell Biologists Geneticists  
Microbiologists Research Chemists

#### COMPUTER SCIENCE AND SUPPORT:

GS-11/12—Salary range \$27,172 to \$35,326 per annum

Biomedical Engineers  
Computer Programmers  
Statisticians

GS-5/7—Salary range: \$14,822 to \$19,268 per annum

Biological laboratory technicians (microbiology, biochemistry, animal)

Applications procedures: For specific job information, application forms and procedures, contact:

**Mr. Ray Mangold**  
Civilian Personnel Office  
Fort Detrick  
Frederick, MD 21701-5000  
Telephone: 301-663-2314/2834

*Equal Opportunity Employer*

### JOHN N. COUCH PROFESSORSHIP IN PLANT BIOLOGY

The Department of Biology, University of North Carolina at Chapel Hill is seeking a distinguished scholar to fill an endowed chair to plant biology to begin as early as July 1988. Individuals with established reputations and strong ongoing research programs are encouraged to apply. Although all areas of plant biology are appropriate, preference will be given to individuals who are utilizing state-of-the-art techniques in addressing problems in plant development or physiology. The successful candidate will be expected to interact with a strong program in plant organismal biology and with an expanding program in plant molecular biology. Letters of inquiry as well as nominations will be held in the strictest possible confidence. For further information please write to: **J. C. Lucchesi, Chairman Search Committee, Department of Biology, Coker 010A, University of North Carolina, Chapel Hill, NC 27514 or call: 919-962-1332. The University of North Carolina is an Equal Opportunity/Affirmative Action Employer.**

### PROTEIN CHEMISTRY FACULTY POSITION ALBERT EINSTEIN COLLEGE OF MEDICINE

The Albert Einstein College of Medicine is seeking a tenure-track faculty member with research interests in the broad area related to protein structure. The successful candidate will manage a central facility for peptide sequencing and synthesis of peptides and oligonucleotides. Technical assistance or operation of the facility will be available. The position is open at any level depending on research productivity and experience. Departmental affiliation is open depending on the experience and training of the applicant. Address applications before 30 November 1987 to:

**Dr. E. Richard Stanley**  
Search Committee for Peptide Facility  
Developmental Biology and Cancer  
Albert Einstein College of Medicine  
of Yeshiva University  
Bronx, NY 10461

*An Equal Opportunity/Affirmative Action Employer M/F.*

## POSITIONS OPEN

**PROFESSOR AND HEAD**—The Biochemistry and Nutrition Department at present has 18 faculty who contribute to varied, contemporary research programs funded primarily by competitive grants. The department awards the Ph.D. and M.S. degrees in a graduate program of 20 to 25 students, and educates 250 majors in a 4-year B.S. program. The head will provide leadership for and manage the department, determine priorities, augment and foster the research and academic environments, and encourage effective relationships with other departments in the College and University. One function for the department in the College is to relate basic research to current problems of agriculture and life sciences. Candidates should have a Ph.D. in biochemistry or appropriate related discipline, a distinguished record of scholarship and professional achievement, and appreciation for all areas of biochemistry. Candidates must present evidence of their management and interpersonal skills. Beginning date: 1 July 1988. Applications will be received until 15 October 1987 or until the position has been filled. Send a letter of application, complete résumé including the names of three references, and a summary of professional goals to: **Dr. James R. Nichols, Dean, College of Agriculture and Life Sciences, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061. Telephone: 703-961-6337. An Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.**

### RESEARCH ASSOCIATE TUMOR BIOLOGY

An established laboratory moving to a new basic research institute seeks Ph.D./M.D., postdoctoral scientist to investigate new approaches to brain tumor therapy based on selective inhibition of lipogenic enzymes. Experience in experimental pathology, pharmacology or in vivo tumor biology would be most helpful. Position is available in October 1987 or later, and features competitive salary, benefits and excellent facilities in an attractive rural setting. Send curriculum vitae and names of three references to: **William Maltese, Ph.D., The Weis Center for Research, Geisinger Clinic, Danville, PA 17822. Equal Opportunity Employer, M/F/H.**

### RESEARCH ASSOCIATE

The Department of General Science at Oregon State University invites applications for a full-time (fixed term) appointment at the research associate level beginning as soon as October 1987. Preference will be given to applicants with experience in regional climatology (with a global perspective), biogeography, plant ecology and/or plant physiology. Computer programming capabilities are desirable. Closing date is 18 September 1987. Send letter of application, curriculum vitae, graduate transcripts, and names, addresses, and telephone numbers of four references to: **Dr. Paul Farber, Department of General Science, Oregon State University, Corvallis, OR 97331. Oregon State University is an Affirmative Action/Equal Opportunity Employer.**

**RESEARCH ASSOCIATE POSITION, Ph.D.** in basic biomedical sciences, minimum 3 years of postdoctorate experience in molecular biology/recombinant DNA techniques, to participate in group research effort on the structure/interactions of basement membrane/extracellular matrix macromolecules. Previous experience in this field desired but not required. Salary negotiable. Send curriculum vitae and names of three persons who can provide letters of reference to:

**Leo Furcht, M.D.**  
Box 609, UMHC, Department of Laboratory  
Medicine and Pathology  
420 Delaware Street SE  
Minneapolis, MN 55455  
by 15 October 1987.

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

### RESEARCH BIOCHEMIST, PH.D.

Position now available for outstanding investigator in program exploring thyroid hormone effect on mitochondrial oxidative phosphorylation. Columbia University appointment paying over \$32,000 per year plus fringe benefits. Salary depends on experience and previous productivity in subject area. Applicant must have publications on mitochondrial bioenergetics, and should be U.S. citizen. Send résumé, bibliography, and reprints to: **Kenneth Sterling, M.D., VA Medical Center, 130 West Kingsbridge Road, Bronx, NY 10468.**

## POSITIONS OPEN

Genentech, Inc. is on the verge of dramatic growth as a major international pharmaceutical company. If you have high academic and scientific standards we would like to tap into your potential in research and process sciences. Current opportunities are available for:

### RESEARCH ASSOCIATES AND PROTEIN BIOCHEMISTRY

You will be responsible for isolation and characterization of natural product proteins and peptides. An M.S. and 2 years of laboratory experience, or a B.S. and 4 years of laboratory experience in biochemistry, physical chemistry, or related field is required. Experience in chromatography, HPLC and micro-analytical characterization techniques are required. Purification of biologically active peptides or proteins, and familiarity with biochemical assays is preferred. Please send your résumé to: **Human Resources, Department SW2117, 460 Point San Bruno Boulevard, South San Francisco, CA 94080. An Equal Opportunity Employer.**

**GENENTECH, INC.**

### RESEARCH ASSOCIATE

Research associate position available immediately to study the molecular aspects of calcium release from the sarcoplasmic reticulum of skeletal and cardiac muscle cells, to clone the genes coding for the protein involved and carry out structure-function analysis. A minimum of 2 years of experience working on the biochemistry/molecular biology of the sarcoplasmic reticulum essential. An M.D. degree and a completed fellowship in clinical cardiology are required due to restrictions in the source of the funds. Salary commensurate with experience. Send curriculum vitae and names of three references to: **Dr. B. Nadal-Ginard, Department of Cardiology, Children's Hospital, 300 Longwood Avenue, Boston, MA 02115.**

### JOINT INSTITUTE FOR LABORATORY ASTROPHYSICS

JILA (operated jointly by the U.S. National Bureau of Standards and the University of Colorado) is devoted to research, study and teaching in atomic and molecular physics, chemical physics, laser physics, astrophysics, precision measurements, geophysical measurement, and related areas. Applications are invited for two programs:

- 1) **Research Associateships** for advanced research by recent Ph.D.s. Applications are accepted and considered anytime throughout the year.
- 2) **Visiting Fellowships** for advanced research by senior scientists. Deadline for completed applications is 8 January 1988.

Further information can be obtained from: **The Secretary, Visiting Scientists Program, JILA, Box 440, University of Colorado, Boulder, CO 80309-0440.**

*The University of Colorado at Boulder has a strong institutional commitment to the principle of diversity. In that spirit, we are particularly interested in receiving applications from a broad spectrum of people, including women, members of ethnic minorities and disabled individuals.*

**RESEARCH ASSOCIATE:** Position available for qualified individual to participate in an on-going study of endothelial cell seeding of vascular grafts. Must have a solid background in endothelial cell biology and culture techniques. Salary: \$20,000.00 per year. Please submit curriculum vitae to:

**William H. Pearce, M.D.**  
Assistant Professor of Surgery  
University of Colorado Health  
Sciences Center, Box C-312  
4200 East 9th Avenue  
Denver, CO 80262

*We are an Affirmative Action/Equal Opportunity Employer.*

The Dana Farber Cancer Institute is seeking to fill a **RESEARCH POSITION** at the level of assistant professor (M.D. and/or Ph.D.) to lead a research group in cytogenetic and molecular genetic studies of human solid tumors. The molecular biologic techniques, which should include in situ hybridization, will be employed to evaluate cytogenetic abnormalities. Expertise in the karyotyping of human solid tumors is important. The academic appointment will be based at Harvard Medical School. Send curriculum vitae and names of three references to: **Dr. Frederick P. Li, Dana Farber Cancer Institute, 44 Binney Street, Boston, MA 02115. An Affirmative Action/Equal Opportunity Employer.**

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

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

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

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

## RESEARCH

### ...to build a better tomorrow

Genetics Institute, located in Cambridge, Massachusetts, is a recognized leader in the field of biotechnology. Our research is committed to the development and application of recombinant DNA technology to human health care, agriculture, and the pharmaceutical industry.

## OLIGONUCLEOTIDE SYNTHESIS

We seek a BS/MS scientist to supervise our DNA Synthesis Group. The successful candidate will have two to three years' experience with the automated synthesis of oligonucleotides and their purification; have a working knowledge of the chemistry of DNA; and demonstrated management/organizational skills. Experience with total gene synthesis and the subsequent cloning steps would be an added advantage.

## QC IMMUNOLOGIST

An immediate opening exists for a talented immunologist to serve as liaison between the Research Development Immunology Group and the Quality Control Department. Duties will include assay development and transfer of immunological (ELISA/RIA) assays to QC. Assays will be optimized and validated for use in QC. Candidate will also be required to perform some routine assays on in-process samples and final product and research samples. Candidates must minimally have an MS degree in Immunology. A minimum of 2 years' experience in RIA and ELISA assay development and actual hands-on experience is essential.

**We offer an excellent salary and complete benefits package. Qualified candidates send your resumes to the attention of the Human Resources Department, Genetics Institute, 87 CambridgePark Drive, Cambridge, MA 02140. An Equal Opportunity/Affirmative Action Employer.**

# Genetics Institute

**U.S. Department of Energy  
OFFICE OF FUSION ENERGY**

**Magnetic Fusion Collaborative  
Research Opportunities**

- On fusion energy R&D projects
- At fusion energy centers and DOE laboratories
- For appropriate science and engineering disciplines
- Stipend based on background
- Travel or moving reimbursement

**Postdoctoral Research Program**

- Up to 2 years of support for recent Ph.D.s

**Professional Development  
Program**

- One month to one year of support for university faculty members and DOE/OFE-supported contractor employees

**Information and Applications**

- Please request materials by program name

Fusion Postdoctoral Research  
Program or  
Fusion Professional Development  
Program  
University Programs Division  
Oak Ridge Associated Universities  
P.O. Box 117  
Oak Ridge, Tennessee 37831-0117  
(615) 576-3190



**Deadline February 1, 1988**

## SENIOR SCIENTIST Peptide Delivery

The LILLY RESEARCH LABORATORIES, a division of Eli Lilly and Company, is seeking candidates for a senior scientist position in peptide delivery.

Applicants must have a doctoral degree and postdoctoral experience is desirable.

Primary responsibilities will be to participate in a research program in the discovery and development of unique systems for controlled delivery of peptides in animals. These research activities would include delivery system design and biopharmaceutical assessment of delivery to specific cellular sites of action.

This position represents a unique challenge to a qualified scientist interested in contributing to multidisciplinary research aimed at the development of new animal health products. Candidates having a thorough knowledge of protein chemistry, the targeting of peptides to specific sites of biological activity, the biological characteristics of cellular receptors and receptor/peptide interactions, and the transport of peptides across cell membranes are invited to send their curriculum vitae to:



**Ms. Carol Zapapas  
Personnel Representative  
Eli Lilly and Company  
Greenfield Laboratories  
P.O. Box 708  
Greenfield, Indiana 46140  
Equal Opportunity Employer**



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

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

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

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

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



**Yale UNIVERSITY**

## **Cellular Neurobiologist or Cell Biologist**

The Department of Biology at Yale University wishes to appoint an assistant professor with an established research interest in Cellular Neurobiology or Cell Biology. The successful applicant is expected to conduct a vigorous research program, interact with a diverse group of cellular and developmental neurobiologists and cell biologists and teach effectively at graduate and undergraduate levels.

Send curriculum vitae, description of research, and names and addresses of at least 3 references by October 1, 1987 to:

**Chairman, Dept. of Biology**  
**Yale University**  
**PO Box 6666**  
**New Haven, CT 06511**

*Yale University is an Equal Opportunity/Affirmative Action Employer. Women and members of minority groups are urged to apply.*

## **CHAIR, DEPARTMENT OF MEDICINE COLLEGE OF MEDICINE**

The Pennsylvania State University College of Medicine is seeking a chairperson in Medicine to succeed Graham H. Jeffries, M.B., Ch.B., D.Phil (Oxon) who has decided to retire from the Chair. The Department has a history of excellence in patient care and teaching and its faculty are leaders in their fields of research. The new chairperson will continue to develop and expand the Department in all areas of patient care, research, and scholarship. The Department currently trains residents and fellows in 12 approved programs. Candidates should have an outstanding record as a clinician, researcher, and educator and should also have proven leadership skills.

Applications or nominations should be addressed to:

**John A. Waldhausen, M.D.**  
**Chairman, Search Committee**  
**for Chair of Medicine**  
**The Pennsylvania State University**  
**College of Medicine**  
**The Milton S. Hershey Medical Center**  
**P.O. Box 850 — A**  
**Hershey, Pennsylvania 17033**

The deadline for applications is November 30, 1987.

The Pennsylvania State University is an equal opportunity affirmative action employer.

## **SENIOR RESEARCH BIOCHEMIST**

We have an immediate need for a Senior Research Biochemist to become part of our innovative Tumor Biology Department. The applicant will have an opportunity to do fundamental research in the area of cell surface glycoproteins and tumor metastases. The applicant should have a PhD in biological sciences with 1 or 2 years of post doctoral experience in biochemistry and enzymology. Research experience in tumor metastases is a plus. The ability of the applicant to work independently as demonstrated by publication record and to work well as part of a group 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**  
**(Refer to Job Code SPS)**

**MERRELL DOW  
RESEARCH INSTITUTE**

**2110 East Galbraith Road**  
**Cincinnati, OH 45215**

*U.S. Citizenship or  
Permanent Visa Required  
Equal Opportunity Employer M/F/H/V*

U.S. ENVIRONMENTAL PROTECTION  
AGENCY (EPA)  
Supervisory Biologist  
(Branch Chief)

The Hazard Evaluation Division of the Office of Pesticide Programs, EPA, invites applicants for the position of Chief, Ecological Effects Branch. The position is open to individuals with strong scientific credentials in aquatic biology or wildlife biology who can demonstrate expertise in assessing risk to ecological systems.

Serious applicants will be recognized scientists of significant peer standing, with strong management credentials. Knowledge of the federal pesticides regulatory program, experience in the administration of regulatory programs, and successful experience in communicating with government officials, industry and the concerned public are also desirable qualifications.

This position may be filled by Civil Service or Public Health Service appointment. Applicants must have at least a bachelor's degree, plus 3 years of appropriate professional experience. Salary ranges from \$45,763 to 69,976 depending upon qualifications.

**APPLICATION SUBMISSION:** Please submit a completed SF-171, available at federal job information centers and federal agency personnel offices, to reach EPA no later than October 3, 1987 to Rachelle Kudrik, Environmental Protection Agency, Hazard Evaluation Division, Mail Code (TS-769-C), 401 M. Street, SW, Washington, D.C. 20460. Also submit SF-171 to Office of Personnel Management, if this has not been done previously, or if previous submission needs to be updated. (PLEASE DO NOT SEND RESUMES.) If you are now or have ever been employed in the federal service, you should also submit a performance appraisal within 1 year of the closing date of the announcement. All applications (SF-171's) postmarked after the above date will be returned. EPA is an Equal Opportunity Employer. U. S. citizenship is required.



## RISK ASSESSMENT WORKSHOP: Reproductive and Developmental Toxicity

Camelot Inn, Little Rock, Arkansas

September 21-23, 1987

### PROGRAM

#### DAY 1—Plenary Session

(Monday, September 21)

##### Introductory Presentations

- Risk Assessment Overview
- Review of Assumptions in Specific Case Studies

##### Introduction to Workshop Groups

- Male Reproduction
- Female Reproduction
- Development

#### DAY 2—Workshop Groups

(Tuesday, September 22)

- Identify and Discuss Assumptions
- Develop Research Strategies

#### DAY 3—Workshop Summary

(Wednesday, September 23)

- Report from Each Workshop Group
- Overall Summary

### Workshop Leaders:

**DBCP:**  
Dr. Donald Whorton,  
Environmental Health  
Associates Inc.

**Dioxin:**  
Dr. Stephen H. Safe,  
Texas A&M University

**Glycol Ethers:**  
Dr. Dale Hattis,  
Massachusetts Institute of Technology

**Heptachlor:**  
Dr. Donald R. Mattison,  
NCTR/University of Arkansas  
for Medical Sciences

**Lead:**  
Dr. Lester Grant,  
U.S. Environmental Protection Agency

**Vitamin A:**  
Dr. Richard K. Miller,  
University of Rochester

**THC:**  
Dr. Donald McMillan  
University of Arkansas  
for Medical Sciences

The purpose of the workshop is to identify the major uncertainties in risk assessments for these endpoints and to devise research strategies to address the uncertainties. For further information, contact:

Dr. John F. Young, 501-541-4304

The workshop is a joint effort of the Risk Science Research Center (a collaborative program of the University of Arkansas, National Center for Toxicological Research, and the ILSI Risk Science Institute), AIHC, ATSDR, CDC, EPA, NCTR, NIEHS, and NCTR Associated Universities, Inc.

## DIRECTOR INSTITUTE FOR FUSION STUDIES The University of Texas at Austin Austin, Texas 78712

The University of Texas at Austin is seeking applications or nominations for the position of Director of the Institute for Fusion Studies. The Institute, which is supported by a long-term grant from the United States Department of Energy, is dedicated to theoretical research in fundamental and applied plasma physics for the understanding and development of controlled fusion, as well as research in related fields of mathematics and physics.

The Institute has approximately 25 academic and research members including visiting scientists, both foreign and domestic. The Institute organizes seminars and workshops on problems of current interest in plasma physics and related disciplines and attempts to be in the forefront of critical research areas in the field. Close collaborative associations exist with other campus plasma research groups including the Fusion Research Center, which is involved principally in experimental fusion research. In addition, the Institute serves to facilitate theory exchanges within the worldwide fusion community, and in this capacity it organizes the United States' component of the U.S.-Japan Joint Institute for Fusion Theory.

The new Director should be distinguished in plasma physics research and dedicated to the advancement of controlled fusion studies on a national and international level. The Director would normally be a tenured faculty member in the Department of Physics.

Please submit letters of application with resume, letters of nomination, or inquiries to: **Prof. R. D. Bengtson, Chairman, Department of Physics, The University of Texas at Austin, Austin, TX 78712.**

Applications and nominations will be accepted until October 15, 1987. Candidates nominated by knowledgeable sources after this deadline may be considered by the Search Committee.

AN EQUAL OPPORTUNITY, AFFIRMATIVE ACTION EMPLOYER

Damon Biotech, Inc., a leading biotechnology company engaged in the developing and marketing of biological products, is offering the following positions:

### ASSOCIATE SCIENTISTS - DEVELOPMENT

Immediate openings for scientists with experience in large-scale mammalian cell culture and knowledge of cellular metabolism and physiology. Responsibilities include maintenance of cell lines and optimizing cell culture conditions, including new media formulations and large-scale cell cultures. BS (Biochemical Engineering, Cellular Biology or allied field) plus 8 years experience or MS with 3 years experience in related field preferred.

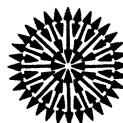
### DEVELOPMENT ASSISTANT

Position available in our Biological Development Lab. Responsibilities include monitoring and maintenance of cell lines, small-scale encapsulations, harvesting of antibodies and preparation for shipment. Requires a BS in Biochemistry or related area and 1-3 years experience.

### SENIOR SCIENTIST - RESEARCH

PhD Scientist needed to supervise research projects in our Cell Biology Department. The qualified candidate will have a minimum of 2 years postdoctoral experience with an emphasis on a maximization and regulation of genetic expression in mammalian cell systems.

Interested applicants should send a resume to Damon Biotech, Human Resources, 119 Fourth Avenue, Needham Heights MA 02194. We are an equal opportunity employer.



**DAMON Biotech**

## POSITIONS OPEN

### RESEARCH MANAGER

Responsible for directing investigations needed for the development and evaluation of commercially viable crop plants, primarily corn, that are genetically resistant to existing agricultural chemical products and/or the development of crop plants that have other genetically engineered traits that are desirable to plant breeders.

Research activities would include the isolation of transformed plant cell lines and regeneration of intact plants; development of techniques for regeneration of "new" crop plants; use of tissue culture manipulation and/or selection for isolation of desirable plant cell mutations and regeneration of these into intact plants; and conduction of preliminary greenhouse testing of regenerated plants for desired expression. Evaluates project proposals and project reports both in-house and from outside the Unit. Designs and proposes research projects. Accountable for managing the activities of from 12 to 14 scientists, determining staffing requirements, and conducting performance appraisals.

Must possess Ph.D. in agricultural biology, botany, plant physiology or plant pathology and 5 years of experience in the job, or 5 years of experience in biotechnical agricultural research. Educational experience must include expertise in regeneration of plants from cell cultures, introduction of macromolecules into higher plant protoplasts, protoplast fusion, selection of mutant plant cells, and tissue culture of monocots or legumes as demonstrated by publication and plant tissue culture lab management experience. Forty hours per week, \$70,500 per year. J.O. NC7100689 DOT Code 189.117-030. Apply to: Job Service, 516 North Mangum Street, Durham, NC 27701 or nearest Job Service office.

**RESEARCH ASSOCIATE—ECOLOGICAL RISK ASSESSMENT:** Characterize and classify critical terrestrial species, processes and ecosystems for risk assessment; evaluate relevant mathematical models. Ph.D. in ecology required. Available October 1987. Send curriculum vitae and three letters of reference to: Dr. Mark Wilson, Botany and Plant Pathology, Oregon State University, Corvallis, OR 97331 by 25 September 1987. Oregon State University is an Affirmative Action/Equal Opportunity Employer and complies with Section 504 of the Rehabilitation Act of 1973.

**RESEARCH ASSOCIATE AND POSTDOCTORAL POSITIONS** available to study the biosynthesis and gene structure of mucin glycoproteins in trachea epithelial cells and cell surface antigens in tumor cells. Studies will include carbohydrate characterization, enzyme and RNA isolation, preparation of antibodies, DNA synthesis and cloning procedures. Salary commensurate with experience. Send résumé to: Dr. Joseph Mendicino, Department of Biochemistry, University of Georgia, Athens, GA 30602.

### SCIENCE POLICY STUDY

The Institute of Medicine/National Academy of Sciences has two openings in the Division of Health Sciences Policy for a new study on Policies for Allocation of Research Funds in the Health Sciences.

**STUDY DIRECTOR**—will organize and manage study activities, including committee and panel meetings, preparation of resource documents, and preparation of the study report. Also responsible for budget management and communications about the study. Requires Ph.D. in a health-related science with 4 years of subsequent experience in laboratory research and 3 years of experience in policy analysis or relevant administrative activities in academia, government, or industry. Also requires good organizational skills, good oral and written communication skills, and ability to work effectively with committee members, consultants, and staff. This is a 21-month appointment.

**STAFF OFFICER**—to assist the Study Director in the conduct of the study by participating in the organization of meetings, preparation of resource documents, drafting of study report, and other duties as assigned. Requires Ph.D. in health-related science or political or social science and 4 years of experience in laboratory research, administration, or policy analysis relevant to understanding research resource needs. Also requires good organizational skills, good oral and written communication skills, ability to work with committee members and other staff, and ability to meet deadlines. This is an 18-month appointment.

Send curriculum vitae and salary requirements to: IOM, Division of Health Sciences Policy, 2101 Constitution Avenue, NW, Washington, DC 20418. Equal Opportunity Employer.

## POSITIONS OPEN

### SCIENTIFIC DIRECTOR TOXICOLOGY

Hazleton, a world leader in providing laboratory services and products to the life sciences industry, is seeking a senior toxicologist to provide scientific direction of toxicological studies conducted by Hazleton-France for client companies worldwide.

Responsible for science, protocols, quality and timely reporting of long term toxicology studies. Operational responsibility for performing laboratory and associated support services. Will participate in marketing of services to clients and presentation of scientific data.

Ph.D. required with 10 to 15 years of in-depth toxicology experience. Good interpersonal and organizational skills and knowledge of commercial toxicology industry are important. Fluency in English and working knowledge of French required.

Laboratories and approximately 100 employees located in Lyon in Central France. Qualified candidates should send résumé including recent salary history, in confidence, to:

Michael J. Mackert  
Hazleton Laboratories Corporation  
Suite 580, 13873 Park Center Road  
Herndon, VA 22071  
An Equal Opportunity Employer

### STAFF DIRECTOR BOARD ON EARTH SCIENCES

The Board on Earth Sciences of the National Research Council maintains broad oversight of national and international earth sciences activities and conducts studies and provides guidance to federal agencies in these areas. The Staff Director, in consultation with the Board chairman, is responsible for the overall planning, management, and direction of the Board's activities. Responsibilities include serving as principal staff officer for the Board and several of its committees; identifying new programs for the Board; preparation of agenda, minutes, and draft reports maintaining liaison with Board members; administration and fiscal management of Board activities; communication with sponsoring agencies and supervision of the Board's staff.

Candidates should have a Ph.D. or equivalent in geological sciences, plus 6 or more years of postdoctoral experience in research or scientific/technical administrative positions. Experience should demonstrate effective management, writing, and communication skills and familiarity with the geological sciences community and associated policy issues.

Please submit résumé immediately to: Dr. Raphael G. Kasper, Executive Director, Commission on Physical Sciences, Mathematics, and Resources, National Research Council, 2101 Constitution Avenue, NW, Washington, DC 20418. Equal Opportunity Employer.

### SYSTEMS ECOLOGIST

The Chesapeake Biological Laboratory seeks an individual with interest and experience in the analysis of coastal and estuarine ecosystems to fill a tenure-track faculty position within the University of Maryland's Center for Environmental and Estuarine Studies. While applications at the assistant professor level are encouraged, rank is open and salary competitive. Previous postdoctoral experience is desired. Send curriculum vitae, a statement of research interests, and the names of at least five references by 15 October 1987 to:

Dr. Douglas G. Capone  
Chairman of Search Committee  
Chesapeake Biological Laboratory  
Solomons, MD 20688-0038

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

## POSITIONS OPEN

### SPACE LIFE SCIENCES GRADUATE LEVEL POSITIONS

The NASA Space Life Sciences Training Program at the Kennedy Space Center is accepting applications for temporary positions (January through August 1988) involving development and implementation of space-related life sciences laboratory projects to be included in an intensive summer educational program. Graduate level persons with teaching experience and background in human vestibular, cardiovascular, or muscle physiology, plant physiology, animal nutrition, microbiology, or combinations of the above are especially encouraged to apply. Send a letter of interest, curriculum vitae, and three letters of reference by 1 November 1987 to:

John R. Puleo  
The Bionetics Corporation  
Mail Code BIO-1  
Kennedy Space Center, FL 32899  
An Equal Opportunity Employer

### SENIOR TECHNICIAN/FACS FACILITY

The Howard Hughes Medical Institute at New Haven is seeking a Senior Technician to manage and operate a centralized Fluorescence Activated Cell Sorter Facility. Duties will include set-up of facility, preparation and analysis of cell samples, and monitoring of equipment. Self-starter, highly motivated, literate, flexible, organized, and efficient. Experience in FACS operation required. M.S. or equivalent highly desirable. Knowledge of cellular immunology a plus.

The successful candidate will be joining an exciting research team and will have significant responsibility. The Howard Hughes Medical Institute offers a highly competitive salary and an attractive and comprehensive benefits package.

In order to be considered for this opportunity, please forward your curriculum vitae, salary history, and two letters of reference in confidence to:

Hal D. Belle Isle  
Manager, Administrative Services  
Howard Hughes Medical Institute  
FMB 410, 310 Cedar Street  
Yale University School of Medicine  
New Haven, CT 06510

### STAFF OFFICER

The Board on Environmental Studies and Toxicology of the National Research Council is seeking a staff officer with experience in policy applications of scientific data, scientific writing, and editing. This individual will conduct or assist in the conduct of studies dealing with research innovations and new applications of physical science or engineering (chemical or environmental) to environmental problems. Skills should include understanding of the use of scientific information in decision-making, the demonstrated ability to integrate data from a wide variety of disciplines, interpersonal communication, and technical writing. Doctoral degree or equivalent is required in the area of environmental science or chemical or environmental engineering. Experience is desirable. Applicants should submit in confidence curriculum vitae, samples of recent publications, and references to: K. Hulebak, NRC/BEST, 2101 Constitution Avenue, NW, Washington, DC 20418. Equal Opportunity Employer.

### TENURE-TRACK ASSISTANT OR ASSOCIATE PROFESSOR GEORGE WASHINGTON UNIVERSITY SCHOOL OF MEDICINE

The Department of Biochemistry is seeking an outstanding scientist with proven track record of excellence in research in molecular biology of proteins and/or protein chemistry who would also provide graduate level teaching expertise in protein and/or enzymology. Please submit curriculum vitae, grant support, and three letters of recommendation by 18 September 1987 to: Dr. Allan L. Goldstein, Professor and Chairman, Department of Biochemistry, The George Washington University School of Medicine, 2300 Eye Street, N.W., Room 530, Washington, DC 20037.



UNITED STATES NAVY

Office of Naval Research  
**GRADUATE FELLOWSHIP PROGRAM**  
**1988**



**For study and research leading to doctoral degrees in  
specified engineering—science disciplines.**

**Introduction:** ONR will award up to 50 three-year fellowships for study and research at U.S. institutions offering doctoral degrees in designated fields.

**Eligibility:** Participants must be U.S. citizens and receive a baccalaureate degree in 1988.

**Objective:** To increase the supply of U.S. citizens trained in disciplines critical to the U.S. Navy's mission.

**Terms:** Fellows selected in 1988 will receive \$13,260 for the first year of tenure. ONR will pay the institution full tuition and fees and provide \$2,000 to the Fellow's department.

**Duration:** Up to thirty six months if academic progress is satisfactory.

ONR Graduate Fellowships awarded in this seventh year of the program will be for study and research in ten major disciplines:

Electrical Engineering  
Mathematics  
Computer Science  
Naval Architecture and Ocean  
Engineering  
Materials Science  
Applied Physics  
Aerospace/Mechanical Engineering  
Biological/Biomedical Sciences  
Cognitive and Neural Sciences  
Oceanography

**GRE scores are required (general test only).**

For application forms and information contact:

**ONR Graduate Fellowship**  
**American Society for Engineering Education**  
11 Dupont Circle, Suite 200  
Washington, D.C. 20036

Only U.S. citizens are eligible.  
Application deadline: February 1, 1988  
Offers of appointment: April 15, 1988  
ONR/ASSEE are equal opportunity employers.

## POSITIONS OPEN

### MOLECULAR, CELLULAR, AND DEVELOPMENTAL BIOLOGY DEPARTMENT OF BIOCHEMISTRY BAYLOR COLLEGE OF MEDICINE

The Department of Biochemistry has several **TENURE-TRACK FACULTY POSITIONS** in the areas of molecular, cellular, and developmental biology. These positions provide newly renovated laboratory space, generous institutional start-up funding, minimal teaching requirements, and the opportunity to build a research program within a large and interactive research community. Applicants at the assistant professor level are preferred, but more senior candidates will be considered. Interested individuals should send their curriculum vitae, a statement of present and future research interests, and the names of three references to:

**Dr. Rodney Kellems, Search Committee**  
Department of Biochemistry  
Baylor College of Medicine  
Houston, TX 77030  
*An Equal Opportunity Employer*

### VIROLOGIST/IMMUNOLOGIST

Assistant or associate research professor, Georgetown School of Medicine, Department of Microbiology. Person will have administrative responsibility for group carrying out virologic and immunologic studies with Human Immune Deficiency Virus. Investigator will also be expected to carry out an independent research program. Previous experience with retrovirus desirable. Newly renovated, well equipped labs.

Contact: **Dr. N. P. Salzman, Division of Molecular Virology and Immunology, Georgetown University School of Medicine, 3900 Reservoir Road, N.W., Washington, DC 20007.** *Equal Opportunity Employer*

## COURSES

### MORPHOMETRY AND STEREOLOGY IMAGE/SIGNAL PROCESSING LABORATORY COMPUTING

A series of related practical short courses.  
Woods Hole, December, 1987

Woods Hole Educational Associates, PO Box EM,  
Woods Hole, MA 02543. Telephone: 617-540-5594.

## CONFERENCES

### The New York Academy of Sciences An International Organization Conference on: **ARACHIDONIC ACID METABOLISM IN THE NERVOUS SYSTEM: PHYSIOLOGICAL AND PATHOLOGICAL SIGNIFICANCE** 14 to 16 April 1988 Hyatt Regency, Bethesda, Maryland

This conference will emphasize arachidonic acid metabolism and regulation of cell functions. Topics to be covered include: the modulation of arachidonic acid release and metabolism; the synthesis of prostaglandins, hydroxyicosatetraenoic acid, and leukotrienes and their possible role in neuromodulation, in signal transduction and in cerebral blood flow. Also, the involvement of arachidonic acid metabolism in brain injury, ischemic damage, convulsive disorders, pain, sleep, aging, and in mental disorders.

There will be a contributed poster session. The deadline for submission of abstracts is **1 January 1988**. A 200-word summary of work to be presented should be sent to: **Amiram I. Barkai, Ph.D., Department of Psychiatry, Columbia University College of Physicians and Surgeons, Box 54, 722 West 168th Street, New York, NY 10032.**

Conference chairmen:

**Amiram I. Barkai, Ph.D.,** Department of Psychiatry, Columbia University College of Physicians and Surgeons, New York, New York.

**Nicolas G. Bazan, M.D., Ph.D.,** Department of Ophthalmology, Louisiana State University Eye Center, New Orleans, Louisiana.

For program and registration information: **Conference Department, The New York Academy of Sciences, 2 East 63rd Street, New York, NY 10021.**

## CONFERENCES

### 1987 ANNUAL CONFERENCE SOCIETY FOR RISK ANALYSIS 1 to 4 November 1987 Wyndham Hotel, Houston, Texas

Meeting theme, **RISK ASSESSMENT IN SETTING NATIONAL PRIORITIES**, will include sessions on:

AIDS  
Humans in Space  
Biotechnology  
Cancer  
Nuclear Safety  
FDA, EPA  
Insurance Crisis  
Natural Disasters  
Policy Considerations  
Risk Communications  
Right-to-Know

For more information, registration forms, contact:  
**Society for Risk Analysis**  
8000 Westpark Drive, Suite 400  
McLean, VA 22102  
Telephone: 703-790-1745

## AWARDS

### THE HEISER PROGRAM FOR RESEARCH IN LEPROSY

Beginning **POSTDOCTORAL RESEARCH FELLOWSHIPS, RESEARCH GRANTS, and VISITING RESEARCH AWARDS** available in amounts up to \$19,000 per year, plus other allowances. Applicants should have M.D., Ph.D., or equivalent degree. Applications by 1 February 1988, for awards to be activated June to December, 1988. For information, write: **The Heiser Program, 450 East 63rd Street, New York, NY 10021.**

## PROGRAMS

**RESEARCH AND EXCHANGE PROGRAM WITH CHINA.** The Committee on Scholarly Communication with the People's Republic of China (CSCPRC) announces the **Visiting Scholar Exchange Program**. Offers grants to Americans in natural sciences and engineering for short-term research in China and to Chinese for scholarly exchange in United States. Application deadline: 10 October 1987. Write to: **CSCPRC, National Academy of Sciences, 2101 Constitution Avenue, NW, Washington, DC 20418.** Telephone: 202-334-2718.

**RESEARCH OPPORTUNITIES AT THE NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH—**Opportunities for faculty and postgraduates to conduct collaborative research at NCTR, a Food and Drug Administration laboratory in central Arkansas. Research efforts focus on testing the assumption used in assessing risks posed by toxic chemicals emphasizing studies in biomarkers, modulators of toxicity, and extrapolation/risk assessment. U.S. citizenship or PRA status required. For more information contact: **ORAU Research Program at NCTR, University Programs Division, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831-0117.** Telephone: 615-576-3190. Please indicate if interested in faculty and/or postgraduate program.

## FELLOWSHIPS

**REGENTS RESEARCH FELLOWSHIPS** in agricultural biotechnology. Training in animal biotechnology (embryo culture and micromanipulation, transgenic animals, nuclear transplantation), animal disease biotechnology (fluorescent cell sorting, hybridoma technology, immunogen analysis of viral, microbial and parasite pathogens through cloning), and plant biotechnology (tissue and cell culture, molecular biology, micropropagation, genetic manipulation for disease resistance). Program leads to Ph.D. in interdepartmental setting. Stipends \$15,000, tuition and fee waiver. Qualification through success in biological, microbiological, biochemical, genetic, or veterinary medical studies. Send inquiries with transcripts, GRE scores, research interests, and three reference letters to: **Dr. J. Storz, Coordinator, Faculty in Agricultural Biotechnology, Room 124 Agricultural Administration Building, Louisiana State University, Baton Rouge, LA 70803.**

## FELLOWSHIPS

**POSTDOCTORAL FELLOWSHIP.** Position for recent Ph.D. for research in lymphocyte cell biology related to human transplantation and neoplasia. Appointment at Harvard Medical School and the affiliated Brigham and Women's Hospital. Starting time flexible. Send curriculum vitae and names of three references to: **Dr. Brian R. Smith, Hematology Division, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115.** *Equal Opportunity Employer.*

**POSTDOCTORAL FELLOWSHIP** available immediately. NIH-funded project to study eating behavior in humans. Send curriculum vitae including names and telephone numbers of three references to: **Dr. Barbara Rolls, Department of Psychiatry and Behavioral Sciences, Meyer 207, The Johns Hopkins University School of Medicine, 600 North Wolfe Street, Baltimore, MD 21205.** *Equal Opportunity/Affirmative Action Employer.*

### NEW ZEALAND UNIVERSITY OF CANTERBURY POSTDOCTORAL FELLOWSHIP IN CHEMISTRY

Applications are invited for the above fellowship. The appointee will contribute to a research program on biologically active compounds from marine sources.

Applicants should possess a Ph.D. or equivalent degree with research experience, and have experience in organic synthesis.

The fellowship will be tenable for 1 year, at a fixed emolument at the rate of \$NZ32,000 per annum, commencing on a date as soon as possible to be arranged.

The cost of return air travel to New Zealand may be deducted from the emolument as a reimbursing allowance. The remaining portion of the emolument would be paid in equal monthly installments. Removal expenses cannot be paid for fixed term appointments.

Applications close on 15 October 1987.

Conditions of Appointment (Quote Code No. CHEM 87/1) may be obtained from the undersigned to whom applications must be addressed: **A. W. Hayward, Registrar, University of Canterbury, Private Bag, Christchurch, New Zealand.**

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Molecular characteristics of drug resistance to antineoplastic agents in tumor cells within the context of a multidisciplinary NCI funded training program focused on the molecular and cellular biologic aspects of neoplasia. Send curriculum vitae to: **I. David Goldman, M.D., Scientific Director, Massey Cancer Center, Medical College of Virginia, MCV Box 230, Richmond, VA 23298.** *Medical College of Virginia is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

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# *The Allosteric Modulation of Amino Acid Receptors and Its Therapeutic Implications*

*The Royal Society, London - 2nd-3rd November, 1987*

## *Sessions*

### **GABA Receptor and Its Modulation**

*Chairman:* E.A. Barnard (U.K.)

*Speakers:* E. Costa (U.S.A.), W. Haefely (Switzerland), A. Guidotti (U.S.A.), W. Wojcik (U.S.A.), R. Nicoll (U.S.A.), N.G. Bowery (U.K.)

### **Gene Cloning of GABA Receptors**

*Chairman:* P. Seeburg (U.S.A.)

*Speakers:* E.A. Barnard (U.K.), T. Curran (U.S.A.), R.H. Mohler (Switzerland), G. Biggio (Italy), D.W. Gallager (U.S.A.), M.L. Barbaccia (U.S.A.)

### **Excitatory Amino Acid Receptors: Electrophysiology**

*Chairman:* K. Krnjevic (Canada)

*Speakers:* P.N.R. Usherwood (U.K.), J. Johnson (France), L. Nowak (U.S.A.), S. Vicini (U.S.A.), S. Cull-Candy (U.K.), J.T. Coyle (U.S.A.)

### **Excitatory Amino Acid Receptors: Biochemistry**

*Chairman:* E. Costa (U.S.A.)

*Speakers:* J. Wroblewski (U.S.A.), F. Nicoletti (Italy), L. Iversen (U.K.), A. Young (U.S.A.), C. Cotman (U.S.A.), J. Black (U.K.)

## *Symposium Chairmen*

E.A. Barnard

MRC Molecular Neurobiology Unit - Cambridge CB2 2QH (U.K.)

E. Costa

Fidia-Georgetown Institute for the Neurosciences - Washington, DC 20007 (U.S.A.)

## *Administration*

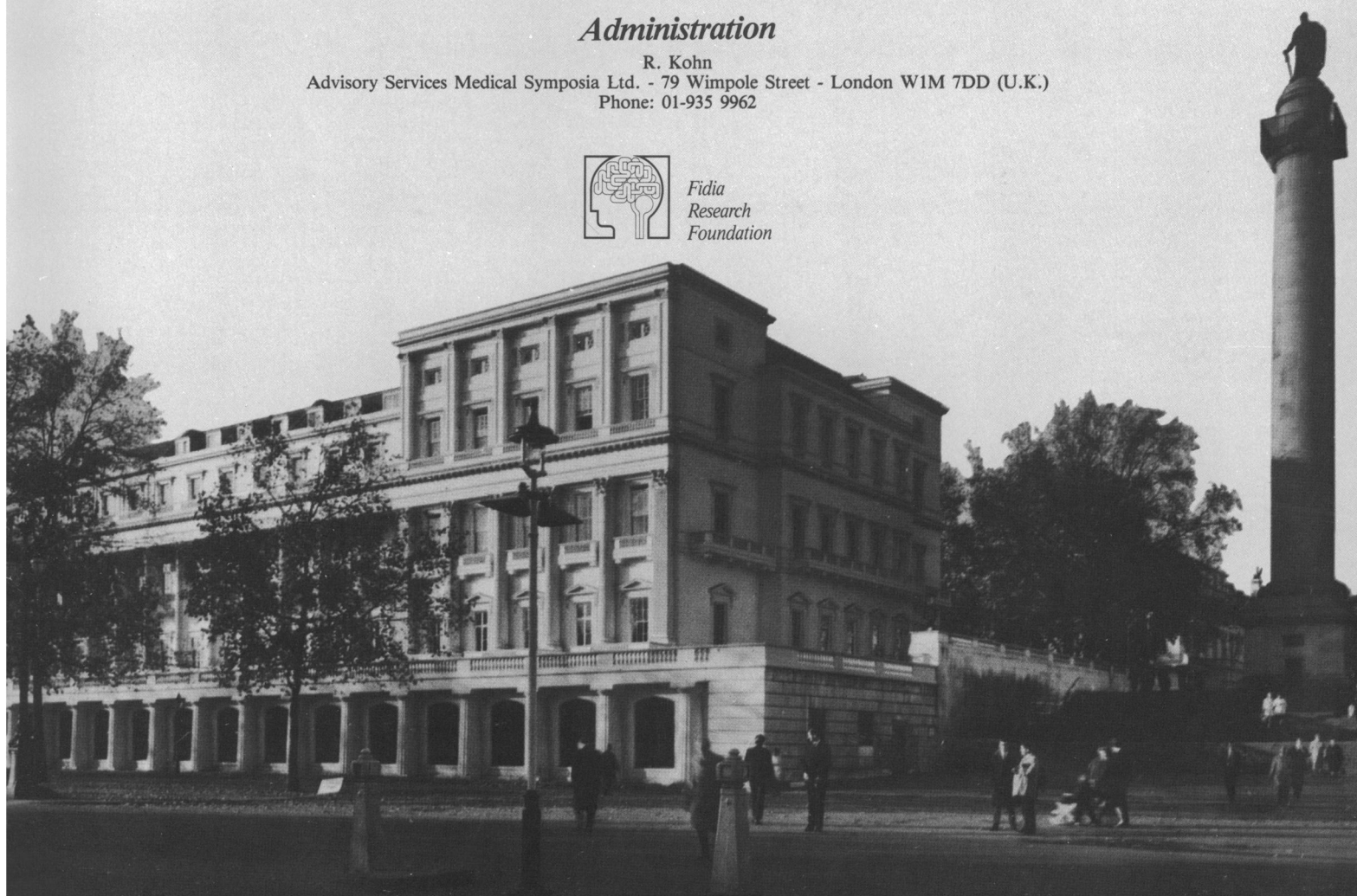
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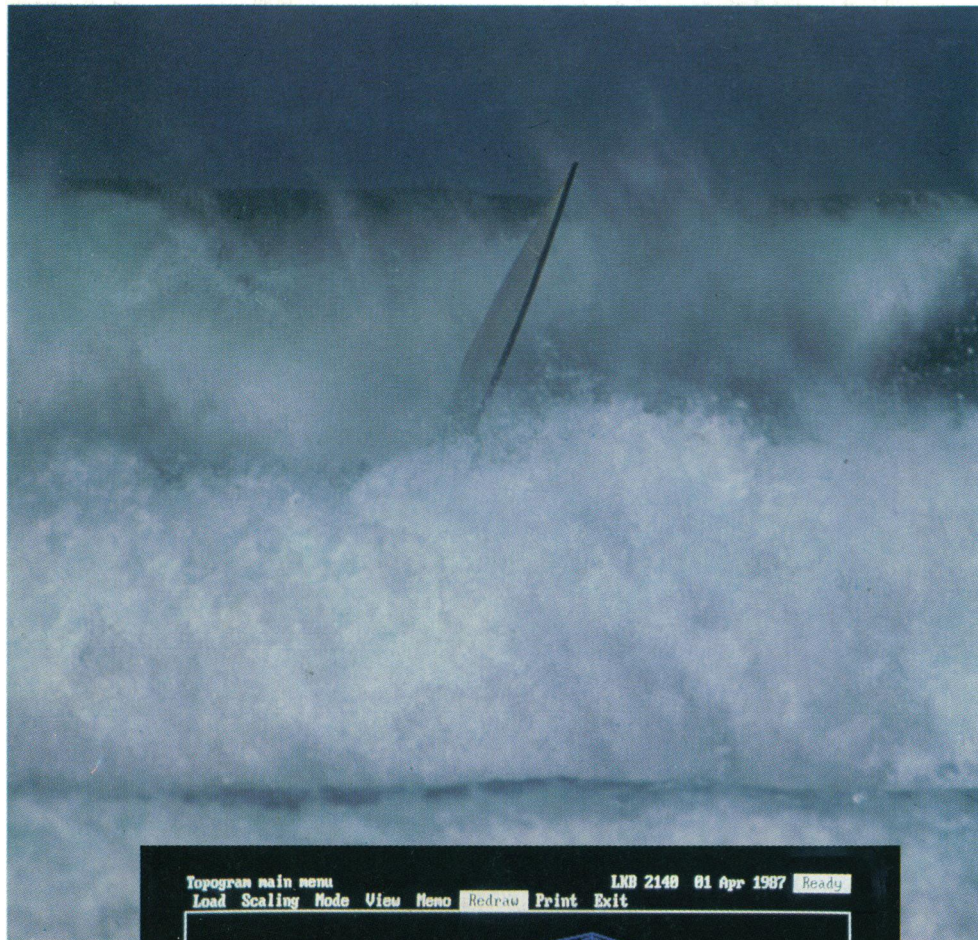


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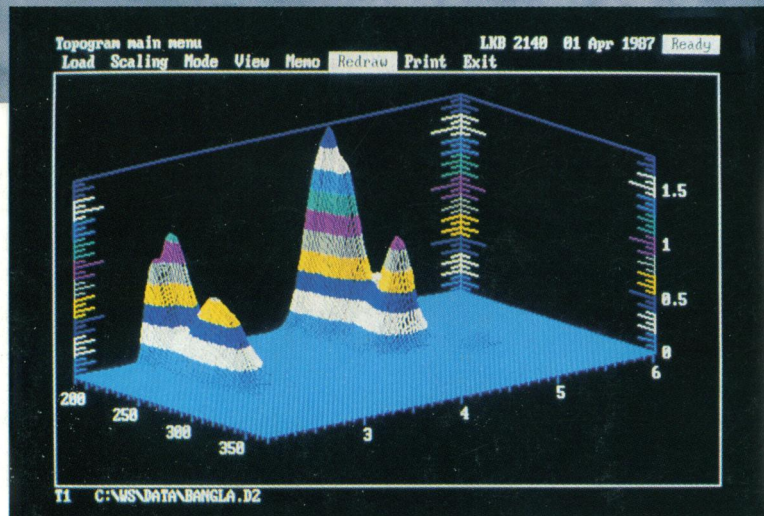
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