

### ***Ultramicrotome for Electron Microscopy***

The MT-7 Ultramicrotome is the thin sectioning of specimens for materials science and life sciences applications in analytical electron microscopy. Normally used in conjunction with a diamond knife, the MT-7 can produce single or serial sections from 10 nm up to 10  $\mu$ M in thickness in 1-nm



increments. With a powerful driven cutting stroke and microprocessor-controlled mechanical specimen advance, the MT-7 makes light work of sectioning ceramics, superconductors, metal oxides, bone, teeth, and composite materials. The MT-7 features high-quality stereozoom optics, multifunction adjustable lighting, a swivelling and tilting stereomicroscope, a digital section counter, and built-in vibration isolation. Research and Manufacturing Co. Circle 480.

### ***Kit to Determine Optimal Buffer***

The OptiTaQ assists in determining the optimal buffer to use with specific primer-target DNA pairs in a polymerase chain reaction (PCR) experiment. The kit consists of 1 ml of each of ten different buffers with magnesium chloride concentrations varying from 5 to 50 mM. The kit is

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 manufacturer or suppliers named by circling the appropriate number on the Readers' Service Card and placing it in a mailbox. Postage is free.

designed to work with *Taq* polymerase from any source. A series of reactions with each of the OptiTaQ buffers is set up for each primer-target DNA pair to be used in a PCR experiment. Normal thermocycling conditions are followed to produce PCR products, and a sample from each of the series of reactions is run on an agarose gel. The buffer that yields the greatest amount of specific product is the one best suited for that primer-target DNA pair. BIOS Corp. Circle 495.

### ***Symbolic Computation for the Macintosh***

MAPLE 4.2.1: Symbolic Computation for the Macintosh personal computer is a new version of software capable of performing computations including integers, rational numbers, polynomials, tensor manipulation, symbolic and numeric approximation, indefinite integration, statistics, linear algebra, calculus, differential equations, and more. Brooks/Cole Publishing Co. Circle 494.

### ***Manual Slide Stainer***

The MicroProbe manual slide stainer brings greater uniformity, reproducibility, and speed to chemical staining, immunohistochemistry, and in situ DNA hybridization. The manual system incorporates the patented capillary-gap technology Fisher first introduced in its Code-On automated system. The system has three integrated components: slide-holder, staining module, and incubator. The slide-holder processes up to 20 specimens at one time. It is designed to eliminate the tedium of individual pipetting and to expose slides to a precise amount of reagent, in the same concentration, for the same duration, at the same temperature, from operator to operator. Fisher Scientific. Circle 488.

### ***Precast Gels for PCR***

Novex precast gels for polymerase chain reaction (PCR) analysis offer more convenience, higher resolution, better sensitivity, and more options than standard agarose gels. They can be set up in 30 s with a leak-proof vertical system, with no mixing or melting necessary. The gels can resolve differences that agarose gels cannot. The user can select from three single-percentage gel concentrations, two comb types, and a high-performance 4 to 20% gradient gel. Novex. Circle 492.

### ***Random Primed DNA Labeling Kit***

The Random Primed DNA Labeling Kit contains exonuclease-free Klenow fragment. Probes made with exonuclease-free Klenow fragment are two to three times as long as those made with regular Klenow fragment under standard reaction conditions, and the total incorporation of labeled nucleotide is improved by 50%. In addition, biotinylated nucleoside triphosphates are incorporated to a greater extent in the labeling reaction over a longer time period. No change in the overall protocol for random-primed labeling is required for exonuclease-free Klenow fragment. United States Biochemical. Circle 493.

### ***Dissolved Organic Carbon Measurement***

Model 555 is a manual-injection analyzer for the determination of dissolved organic carbon in seawater. The instrument permits highly accurate determinations of the oceanic reservoir. The analyzer measures with micromolar sensitivity in the difficult seawater matrix in just 5 min. A 200- $\mu$ l sample is injected onto a platinum catalyst at 750°C. The sample is quantitatively oxidized, and all carbonaceous material is converted to carbon dioxide. Ionics, Incorporated. Circle 484.

### ***Literature***

The 36-page 1990 *Chromatography Autosampler Vial Catalog* features many new sample-handling products including several patented low-volume inserts and supports. Also featured are glass and plastic vials; crimp, plug, and screw-cap closures; and benchtop and manual crimper models. Chromacol. Circle 504.

*Chromatography Solutions for Bioscience* is a 20-page brochure describing separations of biological molecules performed on Hewlett-Packard's high-performance liquid chromatography systems. The brochure features more than 25 typical application problems facing biochemists today. Hewlett-Packard. Circle 509.

Three new *Technical Briefs* describe scanning electron and transmission electron microscopy techniques, extracellular matrix-coating techniques, and procedures for viewing, counting, and analyzing cells grown on Millicell culture plate inserts. Millipore. Circle 510.

*Immunological Reagents for Research* is a catalog listing antibodies, conjugates, proteins, and more. Jackson ImmunoResearch Laboratories. Circle 511.

# Personnel Placement

**SCIENCE** publishes each Friday, except the last Friday of the year, and is mailed on issue date. 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. **SCIENCE** reserves the right, in its discretion, to decline to publish advertisements submitted to it.

## LINE CLASSIFIED ADVERTISEMENTS

**DEADLINE:** Thursday, 10 a.m., 2 weeks prior to issue date. Advertising is accepted only in writing.

**POLICIES:** All classified ads will be edited and typeset according to **SCIENCE** style guidelines. NO ABBREVIATIONS. Any deadline for applications stated in ad must be at least 2 weeks after date of publication.

**CLASSIFICATION:** **SCIENCE** publishes line classified ads under the following headings: **Positions Open, Employment Agencies, Situations Wanted, Courses and Training, Meetings, Announcements, and Marketplace.** Advertisers should specify classification desired; however, **SCIENCE** reserves the right to decline classification requests which it believes may be misleading to readers.

**SUBMISSION:** Prepare double-spaced typewritten ad copy on a separate sheet. On cover sheet, state name and telephone number of contact person, desired date(s) of publication, and billing information, including any special invoicing requests. Mail or FAX to:

**SCIENCE Classified Advertising**  
1333 H Street, NW, Room 940  
Washington, DC 20005  
Telephone: 202-326-6555  
FAX: 202-682-0816

**RATE:** \$41 per line, \$410 minimum, per week. One line equals 52 characters and spaces; centered headings equal 32 characters and spaces per line. No charge for use of blind box number. No agency commission for ads less than 40 lines. To ESTIMATE ad cost, structure ad copy on a 52-character line; include any desired heading on 32-character lines. Each line of heading, one line of white space between heading and body of ad, and all partial lines (including centered reply information, if desired) are counted as full lines. Multiply total number of lines x \$41 = approximate cost of ad, per week. (This is an approximate cost ONLY. Allow for variation between estimated lines and actual typeset lines and resulting final cost. Purchase orders must allow for some degree of flexibility and/or adjustment. **SCIENCE** cannot provide proofs of typeset ads.)

**PREPAYMENT DISCOUNT:** A 3% cash discount is granted to all prepaid line ads. Prepayment in U.S. dollars by checks drawn on U.S. banks is required for all foreign ads.

**CREDIT CARDS:** **SCIENCE** accepts MasterCard and VISA. Both personal and corporate cards may be used. The prepayment discount does not apply to credit card ads.

**BOXES AND LOGOS:** Any 1-column line classified ad can be boxed and/or published with logo. No extra production charge for use of box or logo. For boxed ads, one line equals 48 characters and spaces; two additional lines will be added to cost of ad to allow for top and bottom rules. Logos are billed according to number of lines needed to accommodate logo.

**CANCELLATIONS:** Deadline for cancellations is 10 a.m. Tuesday, 10 days prior to issue date

## DISPLAY PERSONNEL ADVERTISEMENTS

For rates, deadlines, and information about fractional display ads (1/6 page and larger) and all Marketplace listings of available products and services, contact:

**Scherago Associates, Inc.**  
1515 Broadway  
New York, NY 10036  
Telephone: 212-730-1050  
FAX: 212-382-3725

## RESPONSES TO EMPLOYMENT ADS

Applicants should read Positions Open ads carefully in order to submit all required material when responding, and should especially check for any stated deadline for receipt of applications. **SCIENCE** encourages applicants for positions to investigate employment laws, non-discrimination policies, visa requirements, and cultural differences in the country advertising for employees.

To reply to a blind box ad, address correspondence to

**Box (give number)**  
**SCIENCE Classified Advertising**  
1333 H Street, NW, Room 940  
Washington, DC 20005

## POSITIONS OPEN

### ASSISTANT PROFESSOR

Additional M.D. needed to help with care of children, adolescents, and young adults with insulin-dependent diabetes mellitus. Must have training in endocrine-diabetes with completion of endocrine-diabetes Boards or equivalent and be licensed to practice in Colorado. Contact: **Peter Chase, M.D., University of Colorado Health Sciences Center, 4200 East 9th Avenue, Box B140, Denver, CO 80262.**

### ASSISTANT PROFESSOR CHEMICAL SENSES

The Department of Cellular and Structural Biology at the University of Colorado School of Medicine invites applications for a full-time, tenure-track position at the level of **ASSISTANT PROFESSOR**. Preference will be given to applicants with research interests in the cell or molecular biology of chemical sensory systems, and especially research in smell or taste which complements ongoing research at the Rocky Mountain Taste and Smell Center. In addition to pursuing an active research program, the successful applicant is expected to participate in the departmental teaching program. Applicants should have a Ph.D. or M.D. and appropriate postdoctoral training. Review of applications will begin 1 March 1991. Please send curriculum vitae, a two-page description of current and future research, and the names and addresses of three references to: **Dr. Thomas Finger, Search Committee Chairman, Department of Cellular and Structural Biology, B-111, University of Colorado School of Medicine, 4200 East Ninth Avenue, Denver, CO 80262. Affirmative Action/Equal Opportunity Employer.**

### ASSISTANT PROFESSOR MOLECULAR POPULATION GENETICIST UNIVERSITY OF CALIFORNIA—RIVERSIDE

Applications are invited for a tenure-track faculty position in the Department of Biology starting 1 July 1991, in population genetics at the assistant professor level. We are looking for an individual whose research involves empirical studies of evolutionary processes at the genome level.

The individual will be expected to establish a strong research program, teach graduate and undergraduate courses, and participate in the evolutionary biology and the genetics graduate program.

Applicants should submit curriculum vitae, a statement of research interests, and arrange to have letters sent by three to five referees to: **Chair, Molecular Population Geneticist Search Committee, Department of Biology, University of California, Riverside, CA 92521.**

Applications should be received by 1 March 1991, to be assured consideration.

*The University of California is an Equal Opportunity/Affirmative Action Employer. Women and minorities are strongly encouraged to apply.*

The Department of Neurology at the University of Michigan is seeking applications for the following positions:

- A tenure-track, University of Michigan and Veteran's Administration Hospital-based faculty position at the **ASSISTANT PROFESSOR** level. Applicants should be Board-certified or -eligible in neurology with basic science and/or clinical interests in dementia.
- Three tenure-track, university-based faculty positions at the **ASSISTANT PROFESSOR** level, one or more of which will be focused in basic science activities relevant to the dementias. Applicants should be Board-certified or -eligible in neurology with basic science interests and experience.
- Two clinical-track, university-based faculty positions at the **INSTRUCTOR OR ASSISTANT PROFESSOR** level. Applicants should be Board-certified or -eligible in neurology with interests in clinical neurology and teaching. Specific interest or experience in neurological intensive care is being sought for one of these positions.

Candidates should submit curriculum vitae, a brief statement summarizing research/clinical interests and objectives, and three letters of recommendation by 28 February 1991 to: **Robert L. Macdonald, M.D., Ph.D., Department of Neurology, 1108 Neuroscience/1687, University of Michigan, Ann Arbor, MI 48109-1687. The University of Michigan is an Equal Opportunity/Affirmative Action Employer and encourages women and minorities to apply.**

## POSITIONS OPEN

**BIOLOGY/MOLECULAR BIOLOGY.** The Department of Biology, University of Central Arkansas, invites applications for a tenure-track **ASSISTANT PROFESSOR** position in biology (molecular biology) to begin 15 August 1991. Recent Ph.D.'s or postdoctorates are encouraged to apply. Preference will be given to applicants conducting molecular biology research, preferably in endocrinology or neurobiology. The individual will teach introductory and upper division courses in the specialty, as well as biology for nonscience majors. Submit curriculum vitae, copies of transcripts, a brief description of teaching philosophy and research career goals, and three letters of recommendation to: **Dr. Edmond Griffin, Chairman, Department of Biology, University of Central Arkansas, Conway, AR 72032. Telephone: 501-450-3146.** The deadline for receipt of applications is 1 March 1991. *The University of Central Arkansas is an Equal Opportunity Employer.*

**COGNITIVE NEUROSCIENTIST.** Bates College. Beginning in fall of 1991, a new tenure-track position at the **INSTRUCTOR OR ASSISTANT PROFESSOR** level, for a person in any area of cognitive neuroscience. Responsibilities include teaching a basic course in cognitive neuroscience, research methodology, and advanced courses in areas capitalizing on the applicant's strengths, as well as supervision of student research. Applicants are expected to have a strong commitment to undergraduate instruction and research interests appropriate to upperclass student participation. *Women and minorities are encouraged to apply.* Deadline for applications: 1 February 1991. Applications will be reviewed when received. Send curriculum vitae and at least three references to: **Richard V. Wagner, Department of Psychology, Bates College, Lewiston, ME 04240. An Equal Opportunity/Affirmative Action Employer.**

**MOLECULAR BIOLOGIST.** Millersville University. Tenure-track position beginning August 1991 at the rank of **ASSISTANT PROFESSOR**. Principal responsibilities include teaching upper level courses such as molecular genetics and molecular biology, as well as introductory biology courses. Ph.D. and a strong commitment to teaching and maintaining an active research program involving undergraduates required. Must have practical experience in one or more of the following: PCR-related techniques, RFLP analysis, DNA cloning, and sequencing. Opportunity to participate in the growth of a recently developed molecular biology/biotechnology program for undergraduates. Completed applications received by 15 February 1991 will receive full consideration. Applications received after that date may receive consideration at the discretion of the search committee. Send curriculum vitae, copies of transcripts, and three current letters of recommendation to: **Chair, Molecular Biology Search Committee, Department of Biology/S0111, Millersville University, Millersville, PA 17551. An Affirmative Action/Equal Opportunity Employer.**

**NEUROANATOMY, ASSISTANT PROFESSOR,** tenure-track position beginning fall of 1991. Ph.D. required. An active neuroanatomy research program which will involve undergraduate and graduate students is expected. Teaching assignments will include introductory biology, electron microscopy, and a specialty course. Submit curriculum vitae, statement of research plans, and three letters of recommendation to: **Dr. Alan Muchlinski, Chairperson, Department of Biology, California State University, Los Angeles, Los Angeles, CA 90032-8201.** Deadline 25 February 1991 or until filled. *Equal Opportunity/Affirmative Action/Handicapped Employer.*

## INSECT BIOLOGIST

Applications are invited for a regular faculty appointment at the **ASSISTANT PROFESSOR** level. Occidental College expects excellence in both teaching and research. The successful applicant will receive excellent research/teaching/office facilities in a new building and can expect appropriate start-up funds. Applicants will be expected to teach introductory-level physiology, a non-majors course and a course in area of specialty, as well as maintain an active research program that involves students. Send curriculum vitae, statement of teaching and research interests, and three letters of reference to: **Jon E. Keeley, Department of Biology, Occidental College, Los Angeles, CA 90041** by 31 January 1991. *Occidental College is an Equal Opportunity/Affirmative Action Employer and encourages women and minorities to apply.*

## POSITIONS OPEN

**ASSISTANT PROFESSOR, MOLECULAR BIOLOGY OF BONE AND CARTILAGE.** University of Rochester School of Medicine and Dentistry, Rochester, New York.

The Department of Orthopaedics invites applications for a tenure-track position. A doctoral degree and at least 3 years of postdoctoral experience in eukaryotic molecular biology is required. Training in skeletal tissue developmental systems is helpful, but not mandatory. Responsibilities would include teaching, interaction with cell biology faculty in the research unit, and the ability to maintain an independently directed research program with the promise of securing extramural funding. Send curriculum vitae and the names of three references to: J. Edward Puzas, Ph.D., University of Rochester School of Medicine, Department of Orthopaedics, Box 665, Rochester, NY 14642. *An Equal Opportunity/Affirmative Action Employer.*

**CELL PHYSIOLOGIST.** The Department of Physiology, University of Minnesota Duluth, School of Medicine, invites applications for a state-funded, tenure-track position at the **ASSISTANT PROFESSOR** rank. Applicants must have Ph.D., M.D., or D.V.M. degree and 2 years of postdoctoral training in applying recombinant DNA technology to problems in mammalian physiology. Research interest in the biology of the vascular wall is preferred. The successful candidate will be expected to develop an extramurally funded research program and be committed to teaching medical and graduate students. Send curriculum vitae, brief statement of research interests and goals, and three letters of recommendation by 4 March 1991 to: Dr. David E. Mohrman, Physiology Department, School of Medicine, University of Minnesota, Duluth, MN 55812. *The University of Minnesota is an Equal Opportunity Educator and Employer and specifically encourages applications from women and minorities.*

## ECOLOGICAL/EVOLUTIONARY GENETICIST

The Department of Biological Sciences at the University of Illinois at Chicago (UIC) is seeking an **ASSISTANT PROFESSOR** in ecological and evolutionary genetics; position available fall 1991. Successful candidates will be expected to have a Ph.D., and an established interest in the application of genetics to ecological and evolutionary questions. Primary affiliation will be with the Ecology and Evolution Group within a department with a strong representation in molecular biology. Teaching will include a contribution to an undergraduate course in evolution, as well as to speciality courses and graduate seminars. Candidates should submit curriculum vitae, statement of research interests, reprints and preprints, and names, addresses, and telephone numbers of three referees to: Dr. Sidney Simpson, Head, Department of Biological Sciences (M/C 066), E&E Search, University of Illinois, Box 4348, Chicago, IL 60680. Applications will be reviewed starting 1 February 1991 and continue until the position is filled. *UIC is an Affirmative Action/Equal Opportunity Employer.*

**THE SECTION ON MEDICAL INFORMATICS,** Stanford University School of Medicine, invites applications for a position at the **ASSISTANT PROFESSOR** level in the Division of General Internal Medicine, Department of Medicine. Candidates should have formal advanced training in medical informatics and should have excellent teaching abilities. We are particularly interested in candidates who have had experience applying computer science methods in the field of molecular biology. The successful applicant will assist with teaching and administration in a graduate degree program in medical information sciences while conducting a vigorous independent research program in the field. Although applicants may come from a variety of backgrounds, applications from clinicians, particularly internists who otherwise meet the criteria outlined, are especially encouraged. The final job description will be flexibly defined depending on the clinical skills and patient care activities, if any, of the individual. Applicants should send curriculum vitae, a brief statement of their research interests, and names of three referees to: Edward H. Shortliffe, M.D., Ph.D., Professor of Medicine and Computer Science, Head, Section on Medical Informatics, MSOB X-215, Stanford University School of Medicine, Stanford, CA 94305-5479. *Stanford University School of Medicine is committed to increasing representation of women and members of minority groups on its faculty and we particularly encourage applications from such candidates.*

## POSITIONS OPEN

The Division of Urology, University of California, Los Angeles (UCLA) School of Medicine, is recruiting a urologist to join the faculty as an **ASSISTANT PROFESSOR**. Applicants must be Board-certified or -eligible and skilled in teaching, research, and clinical urology. Activities will be divided between the UCLA Medical and the VA Medical Center, West Los Angeles. Experience in molecular biology research related to prostatic disease is desired. *UCLA and its affiliated institutions are Equal Opportunity and Affirmative Action Employers.* Applicants should submit curriculum vitae to: Chief, Division of Urology, UCLA School of Medicine, Los Angeles, CA 90024-1738.

## CELL BIOLOGIST/BIOCHEMIST ASSISTANT PROFESSOR BIOLOGY DEPARTMENT WILLIAMS COLLEGE

Tenure-track position beginning July 1991 for a broadly trained cell or molecular biologist with strong background in biochemistry to teach courses in cell biology and biochemistry. Normally, faculty members teach one course and two laboratories each semester. A research program which can attract extramural funding and involve undergraduates is expected. Special interests might include, but are not limited to, immunology, virology, microbiology.

Ph.D. required, some postdoctoral experience desirable. Please send curriculum vitae, statement of teaching and research interests, and three letters of reference by 1 February 1991 to: Search Committee, Department of Biology, Williams College, Williamstown, MA 01267.

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

**DEVELOPMENTAL PSYCHOLOGIST.** The Colorado College seeks applications for a tenure-track **ASSISTANT/ASSOCIATE PROFESSORSHIP** beginning fall 1991. Applicants should have a Ph.D. in psychology and a commitment to undergraduate teaching and research. Teaching responsibilities include human development, research design, and courses in the general psychology curriculum. All candidates must have an active interest in research on human development. The Colorado College is a private liberal arts institution which is committed to excellence in teaching and research. Salary is competitive. Applicants should send curriculum vitae, a statement of research interest, and three letters of recommendation to: J. Horner, Search Committee, Department of Psychology, The Colorado College, Colorado Springs, CO 80903. Application deadline: 28 January 1991. *The College is an Equal Opportunity Employer and strongly encourages women and minorities to apply.*

## THE UNIVERSITY OF WESTERN ONTARIO DEPARTMENT OF OBSTETRICS AND GYNECOLOGY MOLECULAR BIOLOGIST

A faculty position is available for an established research scientist with postdoctoral experience in molecular biology and with a specific interest in the hormonal control of normal and abnormal growth and development.

The successful applicant will be appointed at the **ASSISTANT/ASSOCIATE PROFESSOR** level in the Department of Obstetrics and Gynecology with a "tenure-track" cross appointment in the Department of Biochemistry or equivalent basic health science department. Salary will be commensurate with experience and qualifications.

Applications including a full curriculum vitae, a summary of research activities, and names of three references should be submitted to: Dr. G. L. Hammond, Director, Cancer Research Laboratories, London Regional Cancer Centre, 790 Commissioners Road, East, London, Ontario, Canada N6A 4L6. Closing date for applications is 31 January 1991. *In accordance with Canadian Immigration requirements, this ad is directed to Canadian Citizens and Permanent Residents of Canada. The University of Western Ontario is an Equal Opportunity Employer.* Positions are subject to budget approval.

**SCIENCE** recruitment ads reach thousands of scientists in all disciplines, worldwide. **Classified Advertising** telephone: 202-326-6555. FAX: 202-682-0816.

## POSITIONS OPEN

### ASSISTANT PROFESSOR CARDIOLOGY DIVISION PREVENTIVE CARDIOLOGY PROGRAM

Applications are invited for an individual with primary appointment in the Division of Cardiology within the Department of Medicine at The Johns Hopkins School of Medicine. Applicants should have an M.D. and be trained in cardiology. Specifically, expertise is required in the biochemistry of the cytoskeleton and membrane lipids, in the molecular biology of growth factors and signaling pathways, in platelet functions and interaction with endothelial cells and other blood cells and coagulation factors. Forward application with curriculum vitae and bibliography to: Myron L. Weisfeldt, Department of Medicine Cardiology Division, The Johns Hopkins Hospital, 600 North Wolfe Street, Baltimore, MD 21205.

**NEUROPATHOLOGIST.** Department of Pathology, University of Virginia Health Sciences Center. A tenure-track position for an AP-NP Board-eligible or Board-certified neuropathologist at the level of **ASSISTANT PROFESSOR** is available. Curriculum vitae, a statement of clinical and research interests, and the names of three references should be sent to: S. R. VandenBerg, M.D., Ph.D., Director of Neuropathology, Department of Pathology, Box 214, University of Virginia Health Sciences Center, Charlottesville, VA 22908. *The University of Virginia is an Equal Opportunity/Affirmative Action Employer.*

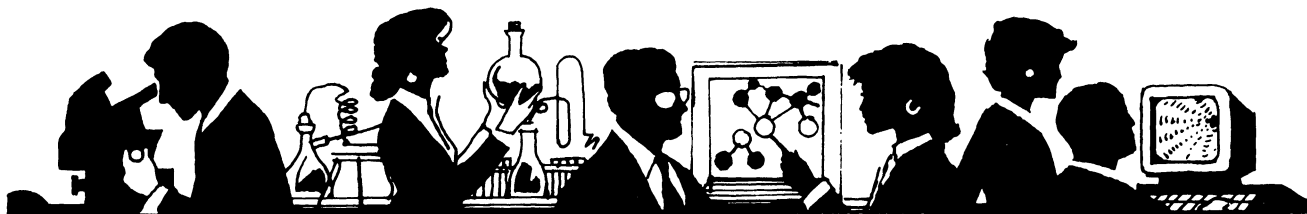
**BIOCHEMIST.** The University of Nevada, Las Vegas (UNLV) has a tenure-track position at the **ASSISTANT (PREFERRED) OR ASSOCIATE LEVEL**. Ph.D. in biochemistry and strong undergraduate chemistry background required. Teaching excellence is emphasized. Research compatible with department goals preferred. We offer an M.S. in environmental analytical chemistry. Send application letter, résumé, unofficial undergrad/grad transcripts, five referee names, and statements of teaching and research goals to: Lawrence J. Tirri, Chair, Search Committee, Department of Chemistry, University of Nevada, Las Vegas, Las Vegas, NV 89154. Application deadline is 1 March 1991 or until position is filled. *UNLV employs only U.S. citizens and aliens authorized to work in the United States. An Affirmative Action/Equal Opportunity Employer.*

**ASSISTANT OR ASSOCIATE PROFESSOR.** Washington State University invites applications for a tenure-track position in **ENVIRONMENTAL SCIENCE AND REGIONAL PLANNING**. Qualifications include a Ph.D.; research emphasis on environmental problems; capability in quantitative methods or GIS; desire to work with students in interdisciplinary B.S., M.S., M.R.P., and Ph.D. programs; and ability to teach subjects such as impact assessment, environmental planning, or applied ecology. Send application, curriculum vitae, reprints, and three letters of recommendation by 1 March 1991 to: Dr. Eldon H. Franz, Search Committee Chair, Program in Environmental Science and Regional Planning, Washington State University (WSU), Pullman, WA 99164-4430. Telephone: 509-335-8536. *WSU is an Equal Opportunity/Affirmative Action Educator and Employer. Protected group members are encouraged to apply.*

### NEW MEXICO HIGHLANDS UNIVERSITY ASSISTANT/ASSOCIATE PROFESSOR ENVIRONMENTAL SCIENCE

School of Science and Technology is accepting applications for a tenure-track faculty position as assistant/associate professor of environmental science to begin 15 August 1991. Responsibilities include participation in the environmental science undergraduate curriculum and graduate life science curriculum, including such areas as radiation, occupational health and safety practices, and environmental restoration and waste management. Supervision of M.S. students and development of extramurally funded research programs expected. Closing date: 15 March 1991 or until filled. Submit letter of application, résumé, official transcripts, and three letters of reference to: Environmental Science Search Committee, School of Science and Technology, New Mexico Highlands University, Las Vegas, NM 87701. Telephone: 505-454-3263. *New Mexico Highland University is a small, state-supported university and is an Affirmative Action/Equal Employment Opportunity Employer.*

*A combination of individual initiative and team philosophy has been the particular mix that has made Burroughs Wellcome Co. one of the foremost names in pharmaceuticals.*



## GREAT PEOPLE MAKE A GREAT COMPANY

### Research Pharmacologist (Pos. #62036-5)

The Experimental Therapy Division has an opening for a research pharmacologist to investigate the absorption, distribution, metabolism, and excretion of potentially therapeutic agents using *in vitro* and *in vivo* preparations, through the use of analytical procedures.

Candidates for the Research Pharmacologist position need a Ph.D. in pharmacology, biochemistry, or related discipline.

### Research Microbiologist (Pos. #62441-5)

The Molecular Genetics and Microbiology Division has an opening for a Research Microbiologist to participate in the development of *in vivo* models of fungal infection and to evaluate the *in vivo* antifungal profile of potential lead compounds and standard therapeutic agents.

Candidates for the Research Microbiologist position need a Ph.D. in microbiology or related field with experience in *in vivo* models of fungal infections. *In vivo* dosing by i.p., p.o., s.c., i.v., intravaginal, and i.m. routes as well as isolation of fungi from tissues, handling fungi by sterile techniques, especially *Cryptococcus* sp., *Aspergillus* sp., and *Candida* sp. is also required.

### Research Fellow (Pos. #61637-5)

The Molecular Genetics and Microbiology Division has an opening for an individual to study the influence of site of tumor implantation on antitumor activity of chemotherapeutic agents. One year of experience in the study of human tumor xenografts in models of metastatic and primary recurrent disease is required. The successful candidate may also investigate biochemical or other parameters relevant to the primary objective.

This position requires a background in tumor biology that emphasizes use of *in vivo* models. A Ph.D. in the biological sciences is preferred. Research Fellows are initially appointed for up to 1 year with renewal for a second year upon the mutual agreement of the employee and Burroughs Wellcome Co.

### Research Virologist (Pos. #62467-5)

The Virology Division has an opening for a Research Virologist to evaluate new compounds for activity against Hepatitis B using tissue culture and antiviral assays.

Candidates need a Ph.D. in biochemistry or virology with experience as a laboratory assistant in biochemistry or virology with emphasis on tissue culture.

Burroughs Wellcome Co. offers top benefit programs along with very competitive salaries. If you are interested in working for us, submit your resume, indicating position number in your cover letter, by **February 15, 1991** to: **Burroughs Wellcome Co., Scientific Recruiting and Staffing, 3030 Cornwallis Road, Research Triangle Park, NC 27709.**

For information on other job opportunities with Burroughs Wellcome Co., call our Job Information Line at **(919)248-8347.**



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Ideal candidate will have a BS/MS in Biochemistry or Analytical Chemistry along with 3-5 years' experience in development of analytical methods for protein and peptides. In addition, experience with HPLC, electrophoresis, and immunological methods is essential.

We offer a competitive salary, benefits package, and an environment which encourages professional growth. For consideration please forward your resume, in confidence, to: Ms. P. Valendo, Schering-Plough Corporation, 2000 Galloping Hill Road, K6, E17, Kenilworth, NJ 07033. We are an equal opportunity employer.

*What you have in mind, we put into action.*



Schering-Plough

## CHAIR DEPARTMENT OF PEDIATRICS AND ADOLESCENT MEDICINE

Nominations and applications are invited for the chair of the Department of Pediatrics and Adolescent Medicine, St. Louis University School of Medicine. The department provides a full range of clinical services in pediatrics at the Cardinal Glennon Children's Hospital. The 190 bed hospital is located adjacent to the School of Medicine and the St. Louis University Hospital. The department is responsible for teaching medical students, training residents and fellows, and carrying on a productive program of research. The hospital in conjunction with the School of Medicine has established the Pediatric Research Institute to further the research endeavors of the department.

Nominations and applications should be addressed to David Lagunoff, M.D., Chairman of the Search Committee, 301 Caroline, St. Louis University School of Medicine, 1402 South Grand Boulevard, St. Louis, MO 63104. (314) 577-8108



St. Louis University  
Medical Center

Cardinal  
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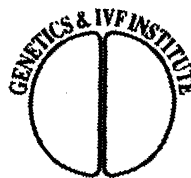
An affirmative action/ equal opportunity employer

## CYTOGENETICS LABORATORY DIRECTOR

The Genetics & IVF Institute is a leader in providing comprehensive laboratory and clinical services in human genetics and infertility. We are a substantial and rapidly growing organization with ambitious plans for the future.

We seek dynamic leadership to direct and expand our amniocentesis cytogenetics laboratory, which is one of the largest in the United States. The Director we seek will have at least 5 years' experience in human cytogenetics, a PhD degree, and board certification by the American Board of Medical Genetics or equivalent evidence of professional qualifications. Excellent scientific and interpersonal skills are essential.

We offer a negotiable salary, excellent benefits, a prime location in suburban Washington, D.C., and a fine environment for professional and personal growth. Please forward your resume to: Personnel Department, Genetics & IVF Institute, 3020 Javier Road, Fairfax, VA 22031.





Universität Heidelberg

The Center for Molecular Biology (ZMBH) of the University of Heidelberg invites applications from candidates of international standing for a

**Full Professorship in Molecular Biology/Neurobiology (C4)**

The successful candidate will contribute to the research activities at the ZMBH which focus on

- gene regulation and differentiation
- molecular neurobiology
- molecular mechanisms of pathogenicity

A research program of the candidate in Molecular Biology/Neurobiology offers the prospect of productive collaborations with many of the 15 research groups currently at the ZMBH as well as the participation in project grants sponsored by the Deutsche Forschungsgemeinschaft, SFB 229 ("Molecular mechanisms of gene expression and differentiation") and SFB 317 ("Molecular biology of neural mechanisms and interactions"). The position also entails involvement in the teaching program of the department.

The ZMBH offers an excellent research environment including central facilities for DNA and peptide synthesis, microsequencing of proteins, FACS, animal facilities, as well as centralized administration and technical services.

Applications should be received by the Director of the ZMBH, Im Neuenheimer Feld 282, D-6900 Heidelberg, FRG, not later than January 25, 1991.

**MIT DIVISION OF TOXICOLOGY  
WHITAKER COLLEGE OF HEALTH SCIENCES AND TECHNOLOGY**

*Faculty Positions*

Applications are invited for a tenure-track faculty position at the Assistant Professor or non-tenured Associate Professor level. Candidates should have doctoral education in biology, biochemistry, chemistry, or toxicology. Areas of research experience and interests should be appropriate to facilitate interactions with other components of current programs, the goals of which are to elucidate at cellular and molecular levels mechanisms through which chemicals and physical agents in the environment induce pathogenesis in humans as well as experimental systems, with the objective of elucidating origins of genetically-linked diseases. Responsibilities of the position include conduct of an active independent research program and participation in the teaching program of the Division.

Applicants should send a curriculum vitae, summary of proposed research, and arrange to have letters sent from three scientists who can provide an evaluation of the qualifications of the candidate with respect to previous accomplishments as well as potential for research and teaching. Applications should be sent to:

Gerald N. Wogan  
Chairman, Toxicology Search Committee  
Division of Toxicology  
Room 16-333  
Massachusetts Institute of Technology  
Cambridge, MA 02139

— MIT is An Equal Opportunity/Affirmative Action Employer —

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

**ASSOCIATE DIRECTOR**

The National Institutes of Health (NIH) invites nominations and applications for the position of Associate Director for Research on Women's Health, Office of the Director. This is a Civil Service position in the Senior Executive Service (SES), with a salary range of \$71,200 to \$79,200. (The projected salary range beginning January, 1991 is \$87,000 to \$100,500.) The person selected may be eligible for a Physician's Comparability Allowance ranging from \$5,000 to \$20,000 per year. A one-year probationary period must be served by the individual selected if not currently in the Senior Executive Service.

The Associate Director for Research on Women's Health serves as the focal point for establishing NIH-wide goals for research related to women's health and for coordinating the direction of and activities undertaken in performing such research. Specifically, the Associate Director for Research on Women's Health is responsible for the development and coordination of a trans-NIH plan to increase programmatic activity in the area of research on women's health and participation of women in clinical studies in general, and clinical trials, in particular; coordination of overall NIH policies related to issues of women's health; and liaison with the other women's health organizations, the extramural community, the Public Health Service, agency coordinating and advisory committees, and other sectors of the Federal government.

For more information contact Ms. Wanda Haney at (301) 496-2400. The following forms are required: Application for Federal Employment (SF-171) accompanied by a current curriculum vitae and bibliography. These must be submitted to:

**Ms. Wanda Haney  
National Institutes of Health  
Office of the Director  
Personnel Office  
Building 31, Room 1C-27  
9000 Rockville Pike  
Bethesda, Maryland 20892**



PHS Commissioned Officers may indicate interest in performing the duties of this position within the Commissioned Corps by submitting a resume.

**APPLICATIONS MUST BE RECEIVED NO  
LATER THAN FEBRUARY 19, 1991.**

\*\*\*NIH is an Equal Opportunity Employer\*\*\*



# CHALLENGING OPPORTUNITIES IN MEDICINAL CHEMISTRY

Dedicated research, innovative marketing, and employee excellence are crucial elements in the advancement of quality medical care. Berlex Laboratories, Inc. has undertaken the task of satisfying the health needs of today and fulfilling those of tomorrow. We are a U.S. pharmaceutical subsidiary of an international Fortune 500 company, located in northern New Jersey just 30 minutes from New York City and easily accessible from Routes 80, 46, and 287. Expansion of our research program has created several new outstanding and challenging opportunities.

## SENIOR NMR SPECTROSCOPIST

The successful incumbent will plan and execute important research projects using our 500 MHz NMR spectrometer. Expertise in state-of-the-art macromolecular techniques is required. Expertise in biophysical aspects such as the determination of peptide conformation in solution is highly desirable. Two to five years of experience at a Ph.D. level are preferred. A close effective collaboration with the peptide synthesis and molecular modeling groups is required.

## THEORETICAL CHEMIST/ GROUP LEADER (Ph.D.)

This is a unique opportunity to head our Computer-Assisted Molecular Design Group. The candidate we seek should have several years of experience in applying macromolecular modeling to compound design, preferably in an industrial setting. Familiarity with quantum mechanical methods and all aspects of modeling, especially of peptides or other macromolecules, is required. Experience with the use of high field NMR and X-ray crystallographic data is an advantage. The ability to interact closely and effectively with a dynamic drug discovery program is essential.

## ANALYTICAL CHEMIST/ GROUP LEADER (Ph.D.)

The individual we seek will be responsible for the planning and execution of a wide variety of challenging analytical work in support of a dynamic drug discovery group. This will also include supervising a group of three Ph.D. level analytical chemists. To qualify, you must have at least three years of industrial experience. Expertise with all chromatographic methods and a familiarity with other standard analytical methods is essential.

Berlex offers a competitive salary, commensurate with experience, and a comprehensive benefits package that includes company matched savings plan, 100% tuition reimbursement and flexhours. For confidential consideration, please send your resume including salary requirements and indicating position desired to: **Joan Lampe, Human Resources Supervisor, Berlex Laboratories, Inc., 110 East Hanover Avenue, Cedar Knolls, NJ 07927.** We are an equal opportunity employer M/F/H/V.

**BERLEX**  
Laboratories, Inc.

## ASSISTANT/ASSOCIATE PROFESSORS UNIVERSITY OF ARIZONA HEART CENTER POSITION OPENING EXTENDED

As part of a University-wide expansion of Biological Sciences at the Arizona Health Sciences Center, the newly established University of Arizona Heart Center is seeking two tenure-track faculty members. Preference will be given to applicants with research interests in the cellular or molecular aspects of cardiac development and who are interested in establishing an interactive investigative research team. We prefer candidates at the Assistant or Associate Professor level, but more senior appointments may be made for exceptional individuals. Successful candidates will be expected to establish an excellent research program in cellular, molecular or systems biology and participate in graduate and medical student teaching programs. Salary will be commensurate with experience and rank, and an academic appointment will be granted in an appropriate department in the College of Medicine. Interested individuals should submit a *Curriculum Vitae*, 2 copies of relevant papers, a detailed description of research goals, and arrange to have 3 supporting letters sent to: **Dr. Mary J. C. Hendrix, Chairman of the Heart Center Recruitment Committee, Department of Anatomy, College of Medicine, University of Arizona, 1501 N. Campbell Ave., Tucson, AZ 85724.** To insure consideration, applications should be received by February 1, 1991; however, applications will be accepted until the position is filled. *The University of Arizona is an Equal Opportunity/Affirmative Action Employer and applications from women and minority groups are strongly encouraged.*

## Post Doctoral Scientist

Monsanto Company's Corporate Research Division has an immediate opening for a Postdoctoral Scientist in the Health Sciences Department.

The successful candidate will join a group exploring the regulation and nutritional dependence of various aspects of cellular physiology. Culture systems will be developed to promote the maintenance of tissue specific properties in vitro, and the cultured cells will be utilized as models of in vivo physiology.

Candidates should possess a Ph.D. in Cell Biology, Pharmacology/Physiology, Biochemistry or equivalent, and have experience with a variety of mammalian cell culture systems. Preference will be given to candidates with strong analytical backgrounds and familiarity with serum-free, defined cell cultures. Familiarity and interest in lipid biochemistry and related signalling pathways is desirable.

For consideration, please send resume and references to: **T.S. Skelton, Supervisor, Human Resources; MONSANTO COMPANY - Mail Zone 02H; 800 North Lindbergh Blvd.; St. Louis, MO 63167.** An Equal Opportunity Employer M/F/H/V.

Careers for people with ideas

**Monsanto**

CHAIRMAN  
DEPARTMENT OF  
CELLULAR AND  
MOLECULAR IMMUNOLOGY

The Beckman Research Institute of the City of Hope, Duarte, CA, is seeking a Department Chairman to head and staff a newly created Department of Cellular and Molecular Immunology. Applicants should have a PhD or MD degree, and have an established laboratory with a record of significant research accomplishments, and external funding. An appointment will be made at the Associate to Full Professor level. Research areas should emphasize molecular approaches in one or more of the following areas: T-cells and T-cell receptor function, immune response and antigen presentation, lymphokines and immune cell modulation, autoimmunity and suppression, immunogenetics, tumor immunology, vaccines, and immune cell therapy. The City of Hope is a modern research facility with programs in protein chemistry, molecular biology, and neurosciences. Ample opportunities are available for research collaborations in both clinical and basic sciences. Qualified individuals should send their curriculum vitae by February 15, 1991, to Dr. John E. Shively, Chairman of Search Committee for Cellular and Molecular Immunology, Beckman Research Institute of the City of Hope, 1450 East Duarte Rd., Duarte, CA 91010. *An Equal Opportunity/Affirmative Action Employer.*

## Experimental Pathologist

The Chemical Institute of Toxicology (CIIT) is an independent non-profit research corporation. Our mission is to improve the scientific basis for understanding and assessing the potential adverse effects of chemicals, pharmaceuticals, and consumer products on human health. We are currently seeking one or more Experimental Pathologists with expertise and interest in toxicologic pathology. Individuals with expertise in renal, hematopoietic or pulmonary injury are preferred.

Qualified candidates should have a D.V.M. and Ph.D., strong publication record, good communication skills, and experience working as a member of an interdisciplinary team. Preference given to Diplomates of ACVP.

CIIT is located in Research Triangle Park, NC which offers many cultural and recreational activities as well as access to 3 major universities. We offer competitive salary and benefits and a stimulating work environment. Interested applicants should send resume and letter of interest to: **Human Resources Manager, CIIT, P.O. Box 12137, Research Triangle Park, NC 27709. (919) 541-2070.**

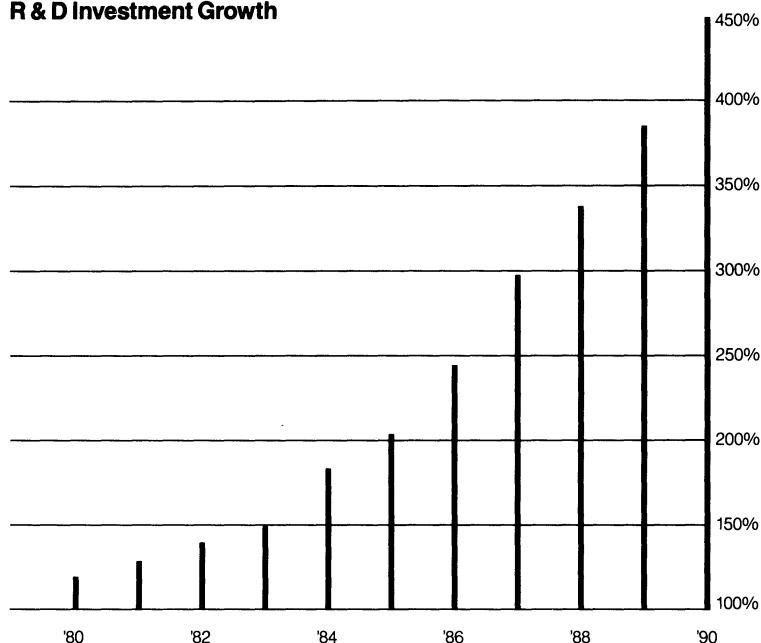
**CIIT**

An Equal Opportunity Employer M/F

# Toxicologists

The reasons to join Pfizer keep growing.

## R & D Investment Growth



The Central Research Division of Pfizer Inc is seeking Research Scientists for our Drug Safety Evaluation Department. These positions offer excellent opportunities for professional growth and recognition, competitive salaries/benefits, and a generous relocation allowance. Central Research is a growing state-of-the-art facility on the coast of eastern Connecticut serving almost 2,000 researchers.

### Toxicologist

Responsibilities include protocol design, safety study supervision, data analysis and preparation of reports for regulatory submissions. Qualifications include a PhD in Pharmacology/Toxicology or a DVM with training in Toxicology. Pharmaceutical experience is desirable but not required. Effective oral and written communications skills are essential.

### Genetic Toxicologist

Responsibilities include initiation of research projects to investigate mechanisms of injury to macromolecular and genetic structures relevant to the evaluation of drugs for therapeutic use. Qualifications include a PhD or equivalent in a relevant field plus experience in evaluating mechanisms of mutagenicity/DNA damage in mammalian systems. A record of publication and excellent written and oral skills are highly desirable.

Qualified applicants should submit a letter of interest and resume to: David G. Burnett, PhD, Assistant Director, Employee Resources, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340. We are an equal opportunity employer.



**Central Research**

Bringing science to life.



## POSITIONS OPEN

**ASSISTANT/ASSOCIATE PROFESSOR OF QUANTITATIVE WILDLIFE BIOLOGY.** The Department of Biology and Wildlife and the Institute of Arctic Biology, University of Alaska, Fairbanks, are seeking applicants with a Ph.D. for a tenure-track faculty appointment as assistant or associate professor to begin 1 September 1991. Applicants should have a record of successful research on statistical models of interest to wildlife biologists and university teaching experience. We encourage applicants with an interest in collaborative studies of subarctic or arctic wildlife populations. Duties include research and teaching wildlife biology. Applicants should send curriculum vitae, reprints of three significant publications, a statement of research and teaching interests, graduate and undergraduate transcripts, and three letters of reference by 28 February 1991 to: **Dr. James S. Sedinger, Chairman, Search Committee, Quantitative Wildlife Biologist, Institute of Arctic Biology, 311 Irving Building, University of Alaska, Fairbanks, Fairbanks, AK 99775-0180. Telephone: 907-474-7028. Equal Opportunity/Affirmative Action Employer.**

### **MICROBIOLOGY/IMMUNOLOGY ASSISTANT/ASSOCIATE PROFESSOR DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY THE MEDICAL COLLEGE OF PENNSYLVANIA**

Tenure-track. Research expertise in molecular host-pathogen interactions or molecular immunology, and interest in collaborating with department faculty. Major areas are aging (nonspecific and specific immune response, immunotherapy, infections) and host-pathogen interactions (intracellular survival mechanisms, molecular biology of STD and opportunistic pathogens). Must have interest in teaching undergraduate medical and graduate students. Applicants should have a Ph.D. or equivalent degree and postdoctoral experience. Extramural funding is required for associate professor position. Please send curriculum vitae, statement of research interests, teaching interests and experience, and the names, addresses, and telephone numbers of three referees to: **Dr. Page S. Morahan, Professor and Chairman, Department of Microbiology and Immunology, 3300 Henry Avenue, Philadelphia, PA 19129.** Deadline for receipt of applications is 15 February 1991 or until a suitable candidate is found. *Affirmative Action/Equal Opportunity Employer.*

### **VETERINARY MOLECULAR BIOLOGIST/PHYSIOLOGIST**

Applications are invited for a tenure-track faculty position at the **ASSISTANT/ASSOCIATE PROFESSOR** level. Qualifications include a Ph.D. in a biological science (physiology preferred) with substantial research experience in molecular biology and a preference for a degree in veterinary medicine. The candidate should have a strong interest in the application of molecular biology to improving the efficiency of livestock production. The appointee will be expected to contribute to a team of physiologists, immunologists, and microbiologists by participating in a major new interdisciplinary research program on the control of reproduction, growth, and disease in livestock. The successful applicant is expected to develop an independent research program with a strong focus on molecular biology as applied to biotechnology in farm animals. Involvement in both the undergraduate and graduate teaching program of the department is expected. The appointee will also advise and direct graduate students and may develop a graduate course in their area of specialization. *In accordance with the Employment Equity policy of this university, women are encouraged to apply.*

Salary will be commensurate with qualifications and experience. Qualified applicants are invited to submit a letter of application including curriculum vitae and the names of three references to: **Dr. D. L. Hamilton, Head, Department of Veterinary Physiological Sciences, Western College of Veterinary Medicine, University of Saskatchewan, Saskatoon, Saskatchewan S7N 0W0, Canada. Telephone: 306-966-7347.**

Applications should reach this office before 30 April 1991.

*In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents. The University of Saskatchewan is committed to the principles of Employment Equity.*

## POSITIONS OPEN

**INVERTEBRATE ZOOLOGIST.** The Biology Department of Ithaca College invites applications for a tenure-eligible position at the **ASSISTANT/ASSOCIATE PROFESSOR** level, starting August 1991, to teach invertebrate zoology and general biology and develop a research program involving undergraduates. Ph.D. with specialization in invertebrate zoology or related field required. Postdoctoral research and/or previous experience desirable. The department is not interested in duplicating expertise of an existing *Drosophila* geneticist and an aquatic ecologist studying fish predation on invertebrates. Send curriculum vitae and three letters of recommendation that specifically address teaching and research potential by 15 February 1991 to: **J. Shaw, Biology Search Committee, Biology Department, Ithaca College, Ithaca, NY 14850. Ithaca College is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.**

The Department of Chemistry, Yale University, invites applications for a tenured position at the rank of **ASSOCIATE PROFESSOR OR PROFESSOR** in inorganic chemistry. An outstanding teacher-scholar is sought whose research interests will complement those of the current staff.

Applicants should submit curriculum vitae and a list of publications to: **Professor Frederick E. Ziegler, Chairman, Department of Chemistry, Yale University, 225 Prospect Street, P.O. Box 6666, New Haven, CT 06511-8118, before 15 February 1991. Yale University is an Equal Opportunity/Affirmative Action Employer.**

### **ASSOCIATE OR FULL PROFESSOR DIRECTOR OF CANCER DRUG DEVELOPMENT PROGRAM THE OHIO STATE UNIVERSITY COMPREHENSIVE CANCER CENTER**

Applications are invited for this tenure-track position by persons with Ph.D. or M.D., experienced in cancer developmental therapeutics, and having a strong record of accomplishment in areas of analytical methods development, biochemical pharmacology, pharmacokinetics, and the mechanism of drug action. In addition to his/her own active research program the successful applicant will coordinate basic research in preclinical and clinical research in the Ohio State University (OSU) Comprehensive Cancer Center emphasizing collaborative interactions between clinical and basic scientists. A leadership role is expected in training and teaching cancer development therapeutics at graduate, undergraduate, and professional levels. Faculty appointment is available in the Colleges of Pharmacy and/or Medicine. Salary negotiable.

Please forward by 1 February 1991 an application letter, curriculum vitae, bibliography, research interests summary, and names and addresses of three references to: **David S. Yohn, Ph.D., OSU Comprehensive Cancer Center, Suite 1132, James Cancer Hospital, 300 West 10th Avenue, Columbus, OH 43210.**

*An Equal Opportunity/Affirmative Action Employer.*

### **CHAIR DEPARTMENT OF BIOLOGICAL SCIENCES**

Applications and nominations are invited for the position of chair of the Department of Biological Sciences at the University of Nevada, Las Vegas (UNLV). This growing department currently consists of 22 faculty members and offers the B.S. and M.S. in biological sciences and a Ph.D. in environmental biology. Applicants must have a demonstrated commitment to research and teaching at both the undergraduate and graduate level. The field of expertise is open, and academic rank and salary will be commensurate with experience. The position may be assumed as early as 1 July 1991. Applicants should submit a letter detailing their interests and qualifications, curriculum vitae, and the names, addresses, and telephone numbers of five references to: **R. Keith Dupre, Chair, Search Committee, Department of Biological Sciences, University of Nevada, Las Vegas, Las Vegas, NV 89154.** Review of applications will begin 15 February 1991 and continue until the position is filled. *The University of Nevada, Las Vegas, is an Equal Opportunity/Affirmative Action Employer. UNLV employs only U.S. citizens and aliens authorized to work in the United States. Qualified women and minority candidates are encouraged to apply.*

## POSITIONS OPEN

### **CHAIRPERSON**

Department of Microbiology and Immunology, School of Medicine, West Virginia University (WVU). We invite applications from individuals holding a Ph.D. and/or M.D. degree with an outstanding record of extramurally funded research, a strong teaching record, and enthusiasm for medical and graduate student education. We are seeking candidates from a wide spectrum of disciplines and research areas within microbiology/immunology. The deadline date for receipt of applications is 1 March 1991. Interested applicants should send curriculum vitae, a summary of research goals, and the names of three references to:

**Diana S. Beattie, Ph.D.  
Microbiology and Immunology  
Search Committee Chair  
Department of Biochemistry  
WVU School of Medicine  
Morgantown, WV 26506**

*An Equal Opportunity/Affirmative Action Employer.*

### **NEW MEXICO STATE UNIVERSITY DEAN COLLEGE OF ARTS AND SCIENCES**

Applications and nominations of outstanding academic leaders are invited for the position of dean of the College of Arts and Sciences at New Mexico State University (NMSU), a Carnegie I research institution serving over 12,500 undergraduate and 2,000 graduate students with 75 major undergraduate programs, 45 master's, and 19 doctoral degree programs.

Effective date of appointment: 1 July 1991. Application deadline: Postmarked no later than 1 March 1991. For information contact:

**Dr. Virginia C. Higbie, Chair  
Arts and Sciences Search Committee  
New Mexico State University  
P.O. Box 30001, Department 3446  
Las Cruces, NM 88003-0001  
Telephone: 505-646-3526**

*NMSU is an Equal Opportunity/Affirmative Action Employer with a strong interest in recruiting qualified minority and women candidates.*

### **UNIVERSITY OF KENTUCKY (UK)**

UK seeks a **DIRECTOR OF ACADEMIC COMPUTING SERVICES.** Responsibilities include planning, managing, and directing university-wide computing information services to support academic instruction/research needs. UK seeks candidates with broad understanding and sensitivity to academic computing needs, college level teaching/research experience, and excellent communications and interpersonal skills. Terminal degree and eligibility for tenured faculty appointment is desirable. Send letter of application, statement on your interest and qualifications in computing, résumé, and four references to: **Dr. Paul Eakin, UK Computing Center, 128 McVey Hall, Lexington, KY 40506-0045.** Screening starts 25 January 1991, continuing until a candidate is selected. *An Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

### **ALBANY MEDICAL CENTER**

#### **DIRECTOR, EXPERIMENTAL PATHOLOGY**

We seek a senior investigator for an endowed position as director of Experimental Pathology Division of a large university pathology department. Existing active programs in carcinogenesis, tumor molecular biology, immunobiology, and atherosclerosis research. Excellent space and departmental facilities available. Outstanding salary/benefits at the **ASSOCIATE/FULL PROFESSOR** level. Superb geographic area of lakes, mountains, sports, and cultural activities.

#### **EXPERIMENTAL PATHOLOGISTS**

Positions available for entry level tenure-track faculty at the **ASSISTANT PROFESSOR** level.

Applicants should respond with cover letter, curriculum vitae with recent reprints, and names of three references to:

**Jeffrey S. Ross, M.D.  
Professor and Chairman  
Albany Medical College (A-81)  
Albany, NY 12208**



**The Division of Research  
Grants  
National Institutes of Health**

Invites inquiries into special employment opportunities as **Health Scientist Administrators** of study sections in various scientific fields. Study sections, managed by Health Scientist Administrators, known as Executive Secretaries, provide the initial review for technical and scientific merit of research grant applications submitted to NIH.

We are seeking individuals with proven independent research experience in the health related sciences. Individuals must be U.S. citizens and have a Ph.D. degree or equivalent in an academic field of health or pertinent sciences allied to health or health related research. At least one year of experience in research program administration and a Health Scientist Administrator rating from the Office of Special Examiner, NIH is required.

Further information and qualification requirements can be obtained by contacting the:

**Personnel Office  
Division of Research Grants  
National Institutes of Health  
5333 Westbard Avenue  
Room 438  
Bethesda, MD 20892  
(301) 496-7577**

*NIH is an Equal Opportunity Employer*

**RESEARCH SCIENTISTS**

We are seeking highly motivated Research Scientists to join the School of Pharmacy at the University of Southern California to conduct research and development of central nervous system (CNS) active agents under a contract from CoCensys, Inc. CoCensys Inc., is an innovative new company focused on the frontier of molecular therapeutics as it relates to diseases of the CNS. Current opportunities include:

**MOLECULAR BIOLOGIST**

A Ph.D. degree with research experience in molecular cloning is desired. The successful candidate should be familiar with techniques including isolation of mRNA, constructing and screening cDNA and genomic libraries, and construction of expression vectors for a variety of receptors.

**DRUG METABOLISM SCIENTIST**

An analytical/pharmacokinetics chemist at the Ph.D. level or M.S. with 2 years experience in the isolation and identification of metabolites using GC, mass spec., NMR and HPLC is required.

**MEDICINAL CHEMISTRY**

Synthetic organic chemist at the Ph.D. level or M.S./B.S. with at least 2 years experience in the preparation of prodrugs of CNS active agents preferred.

Salaries are comparable to those of industry appointments. Please send resume and three references in strictest confidence to: Dr. Nancy Lan, USC School of Pharmacy, Los Angeles, CA 90033-1086. The University of Southern California is an affirmative action/equal opportunity employer.

**POSITION AVAILABLE**

**Alcohol, Drug Abuse, and Mental Health Administration  
National Institute of Mental Health  
U.S. Public Health Service  
Deputy Division Director**

The Division of Basic Brain and Behavioral Sciences, NIMH, has an immediate opening for a supervisory interdisciplinary scientist to serve as Deputy Director of the Division. The Division supports a broad range of research in neuroscience, behavioral, and basic sciences through grants and contracts to universities, hospitals, and other research organizations. The Division has an annual budget of approximately \$70 million, which supports research, research development, and research training activities, and has a staff of about 40. The Deputy Director assists the Director in the scientific and administrative management of the Division, and in the evaluation and development of basic research programs related to mental illness. Therefore, a broad knowledge of the scientific fields represented by Division programs is essential.

Applicants should possess an M.D. or a Ph.D. degree, or equivalent training, in a discipline related to neuroscience, basic, or behavioral science, and should have extensive experience in direct research as well as research administration. The position will be filled through the Civil Service or Commissioned Corps of the U.S. Public Health Service. The grade of the position is a GM-15, with a salary range from \$61,643 to \$80,138 per annum (up to \$83,389 for Medical Officers). Medical Officers may be eligible for an additional physicians comparability allowance (PCA) of \$4,000 to \$16,000 per year. Benefits include a retirement plan, health and life insurance, sick and annual leave. Relocation expenses may be paid. Duty Station is Rockville, MD. U.S. citizenship is required.

Submit Application for Federal Employment (SF 171) and curriculum vitae to Ms. Topaz, NIMH Personnel Office, Room 15C-12, 5600 Fishers Lane, Rockville, MD 20857, (301) 443-9094. Applications must be postmarked no later than March 15, 1991.

**ADAMHA is an Equal Opportunity Employer**

## POSITIONS OPEN

### DEAN SCHOOL OF NATURAL RESOURCES THE UNIVERSITY OF MICHIGAN

Applications and nominations are invited for the position of dean of the School of Natural Resources at the University of Michigan. The dean is the chief academic and administrative officer of the school and reports directly to the academic vice president. The School of Natural Resources is an interdisciplinary, research-oriented, professional school, focusing on research and the development of policies and management programs that promote the conservation, protection, and sustainable use of natural resources. In addition, the school educates practitioners and researchers who will seek these ends. The school's activities include instruction at the undergraduate, master's, and doctoral levels and an active research program. Faculty interests are diverse: resource ecology and management, resource policy and behavior, and landscape architecture. The school is committed to an integrative, interdisciplinary, problem-solving approach in collaboration with related disciplinary departments and professional schools.

The dean provides leadership in program planning, development, and evaluation. Qualifications should include an earned doctorate, a distinguished record appropriate for a tenured appointment in the school, and the ability to generate funds for programs at the local, state, national, and international levels. The committee will begin reviewing candidate files on 4 February 1991. Applications and nominations should be sent to: **Professor Burton Barnes, Chair, School of Natural Resources, Dean Search Advisory Committee, The University of Michigan, 520 East Liberty, Ann Arbor, MI 48104-2210.** A nondiscriminatory, Affirmative Action Employer.

### SCIENCE DIRECTOR WEST COAST NATIONAL UNDERSEA RESEARCH CENTER UNIVERSITY OF ALASKA FAIRBANKS

The University of Alaska Fairbanks is a new Center for NOAA's National Undersea Research Program. The science director will be responsible for the direction and coordination of the undersea science program for the U.S. West Coast and Antarctica. Duties include (i) develop effective communication with research, (ii) develop and implement programmatic research themes, (iii) prepare annual announcement of research opportunities and coordinate proposal review, (iv) assist with preparation of the Center's annual report and proposal to NOAA, and (v) some supervision of Center staff. The science director will report to the center director. This is a 12-month per year appointment. Preferred qualifications include a Ph.D. in oceanography, submersibles and ROV's. Communication and interpersonal skills will be evaluated. Applications will be accepted until 8 February 1991, or until a qualified applicant is found. Submit résumé and names and addresses of three references to:

**Director  
West Coast National Undersea Research Center  
School of Fisheries and Ocean Sciences  
University of Alaska Fairbanks  
Fairbanks, AK 99775-1080**

*The University of Alaska is an Affirmative Action/Equal Opportunity Employer and educational institution. Person hired must comply with provisions of the Federal Immigration Reporting Act of 1986 and have a valid social security number.*

Your application for employment may be subject to public disclosure should you be selected as a finalist.

**MANAGER, WEED SCIENCE LABORATORY.** Ishihara Sangyo Kaisha (ISK) Mountain View Research Center, an agricultural and scientific research arm of ISK emphasizing basic research, is seeking a self-motivated, highly creative plant scientist to head a small group of researchers involving the discovery and development of new agrochemical products.

We are looking for a Ph.D. plant scientist with a strong background in plant physiology, plant biochemistry, chemical ecology, and herbicide modes of action. Strong leadership and interpersonal skills are essential. Oral and written communication skills are also important.

ISK offers an outstanding professional environment, an opportunity for professional growth, and an attractive salary. For immediate consideration, please forward your curriculum vitae to: **Dr. Y. S. Hwang, 600 Montgomery St., 5th Fl., San Francisco, CA 94111.** Our research facility is located in Sunnyvale, California.

## POSITIONS OPEN

### DIRECTOR, MARINE SCIENCES INSTITUTE THE UNIVERSITY OF CONNECTICUT

The University of Connecticut is seeking a dynamic person for the anticipated position of director, Marine Sciences Institute (MSI), to begin September 1991. The candidate should have a national/international reputation in the marine sciences, an outstanding record of scholarship and research, and excellent leadership/administrative skills. Responsibilities include development of marine research activities, interaction with state and federal agencies, and supervision of institute personnel and facilities. The director will work with the Department of Marine Sciences, in which he/she will hold an academic appointment. The institute includes 40 Ph.D.-level members, of which 20 are in residence. It annually administers \$6 million of sponsored research funds.

A Ph.D. in oceanography or a related field, a research/publication record commensurate with a tenure-track position at the professor level, and appropriate administrative experience are required. Salary is commensurate with experience. Send applications (curriculum vitae, letters of reference, research goals) to: **J. G. Henkel, Chair, MSI Search Committee, Graduate School, University of Connecticut, 438 Whitney Road Extension, Storrs, CT 06269-1006.** Review of applications begins 1 March 1991 and continues until the position is filled. *Affirmative Action/Equal Opportunity Employer. (Search #1A189.)*

### PROGRAM DIRECTOR NATIONAL RESEARCH INITIATIVE COMPETITIVE GRANTS PROGRAM U.S. DEPARTMENT OF AGRICULTURE

The National Research Initiative Competitive Grants Program (formerly Competitive Research Grants Office), USDA, seeks a qualified scientist to serve as program director for grant review and administration in the area of ecology [encompassing soil chemistry and biophysics; rhizosphere biology (soil, plant and microbial interactions); plant/water contaminant interactions; and wetland, riparian, or forest ecology]. Candidates must have a Ph.D. or other degree with major study in biology or related field. This should include at least 30 semester hours in basic and applied biology or related field of science. These hours must have included at least 9 semester hours of ecology and 12 semester hours of physical and/or mathematical sciences, or equivalent appropriate professional experience.

Closing date is 18 February 1991. For further information on this full-time, permanent position, contact: **Dr. Anne Datko, NRICGP, USDA, Room 323 Aerospace Building, Washington, DC 20250-2200. Telephone: 202-401-4871.** For information on application procedures/forms, contact: **Ms. Kathy Asmussen, Personnel Staff Specialist, 202-475-4811.** *USDA is an Equal Opportunity Employer.*

**MOLECULAR BIOLOGIST/INFORMATION SPECIALIST.** The National Library of Medicine (NLM), National Institutes of Health, Public Health Service, has full-time permanent openings for technical information specialists to analyze published gene sequence data from international biomedical journals as part of its indexing operation. Positions to be filled are at the GS-9 (starting at \$24,705) or GS-11 (starting at \$29,891) level. For application package, contact: **Ms. Apolito, NLM, Building 38, Room 2N17, 8600 Rockville Pike, Bethesda, MD 20894. Telephone: 301-496-4943.** *NLM is an Equal Opportunity Employer. U.S. citizenship required.* Applicants must meet the following selective factors: experience in gene sequence analysis or molecular biology and knowledge of at least two foreign languages (knowledge of computers may be substituted for one of the foreign languages). **Vacancy #9037L095.** Applications must be postmarked by 1 July 1991.

**INSTRUCTOR POSITION.** Available November 1991, Ph.D. with experience in cell biology and biochemistry of algae to study adenylate cyclase in *Chlamydomonas*. Appointee should have experience in cell fractionation, membrane protein purification, and electron microscopy, as well as experience in teaching research methods to undergraduate and graduate students. Send curriculum vitae to: **William J. Snell, Department of Cell Biology and Neuroscience, University of Texas Southwestern, 5323 Harry Hines Boulevard, Dallas, TX 75235.** *University of Texas Southwestern is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### SENIOR FACULTY POSITION

The Department of Comparative Medicine, Tufts University School of Veterinary Medicine, seeks a senior investigator with established expertise in the pathogenesis of infections, particularly as they pertain to gastrointestinal diseases. Position requirements include the D.V.M. (or equivalent) and Ph.D. degrees, a strong record of research accomplishment with sustained program growth and development, and the ability to develop a program focused in microbial pathogenesis using both standard and molecular approaches to investigate host-organism interactions. Responsibilities will also include participating in the pathogenic microbiology course taught to veterinary students. The program will be located in newly constructed, well-equipped laboratories located at the school's North Grafton, Massachusetts, campus. Salary and benefits are competitive. Applications will be received until 1 April 1991. Applications should include curriculum vitae, a brief statement of research goals, and three letters of reference sent to: **Dr. Carol Reinisch, Chairperson, Department of Comparative Medicine, 136 Harrison Avenue, Boston, MA 02111.**

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

### LECTURER-PHYSIOLOGY/BIOMECHANICS

The University of California, Los Angeles (UCLA), Department of Kinesiology, Division of Life Sciences, invites applications for three full-time lecturers to teach systems physiology, performance physiology, or biomechanics/anatomy. Appointees will teach at both undergraduate and graduate levels. Applicants should have a Ph.D. or M.D. degree; salary will be commensurate with qualifications. These 1-year positions will begin 1 July 1991. Deadline for receipt of applications is 15 March 1991. Submit your curriculum vitae and a cover letter that includes the names and addresses of three individuals who may be contacted for letters of reference to: **Ronald F. Zernicke, Ph.D., Department of Kinesiology, 2859 Slichter Hall, UCLA, Los Angeles, CA 90024-1568.** *The University of California is an Equal Opportunity/Affirmative Action Employer.*

**BIOCHEMISTRY FACULTY POSITION.** Temple University School of Medicine. Applications are invited for a tenure-track position at the **ASSISTANT PROFESSOR** level starting after 1 July 1991. The department seeks a scientist with outstanding potential who is using techniques of molecular biology and/or physical biochemistry to study the mechanism of enzyme action. This person will be required to contribute to the department's teaching program for medical, dental, and graduate students in areas of enzymology and regulation of metabolism and to develop a strong, externally funded research program. The department is well equipped and all members are engaged in funded research projects. Applicants should submit before 1 March 1991, (i) curriculum vitae, (ii) a brief statement of research interests and plans, (iii) title pages with abstracts of recent publications, and (iv) the names and addresses of three references to: **Dr. J. Kenneth Hooper, Chair, Search Committee, Department of Biochemistry, Temple University School of Medicine, 3420 North Broad Street, Philadelphia, PA 19140.**

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

**SYNOPTIC/MESOSCALE METEOROLOGY.** The University of Michigan Department of Atmospheric, Oceanic, and Space Sciences invites applications for a tenure-track **FACULTY POSITION** for the fall of 1991. The preferred area of specialization is synoptic or mesoscale meteorology, although qualified candidates in related areas will be considered. The successful candidate will be expected to teach undergraduate and graduate synoptic and/or mesoscale meteorology courses, develop a strong research program, and interact with the university's expanding Global Change Program.

The available position may be filled at any rank, commensurate with the qualifications of the applicant. Applicants should submit, by 15 February 1991, a complete résumé, statement of future research and teaching interests, and names of at least three references to: **Perry J. Samson, Atmospheric Sciences Search Committee Chair, Department of Atmospheric, Oceanic, and Space Sciences, 2126 Space Research Building, University of Michigan, Ann Arbor, MI 48109-2143.**

*The University of Michigan is an Equal Opportunity/Affirmative Action Employer and Educational Institution.*

# POSTDOCTORAL POSITIONS

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Hoffmann-La Roche is one of the world's foremost companies involved in pharmaceutical and medical research. We have a variety of research opportunities in our Exploratory Research organization, located at our Nutley, New Jersey headquarters.

## MOLECULAR GENETICISTS

You will study the structure/function relationships of cytokines and enzymes; the biochemistry and molecular biology of cell surface receptors and adhesion proteins; and novel systems for gene expression in transgenic mice. Ph.D. in Biochemistry/Molecular Biology/Cell Biology required; experience in recombinant DNA technology preferred. **Please refer to Position CJ on C.V.**

## MOLECULAR ONCOLOGIST

You will utilize your expertise in molecular biology to further characterize the *ras* signal transduction pathway, tumor suppressor gene products or the mechanisms by which cytokines exert their anti-cancer effects. A Ph.D. in Molecular Biology or Biochemistry with a background and interest in oncology required. **Please refer to Position AW on C.V.**

## MOLECULAR VIROLOGISTS

One position will involve the study of human papillomavirus gene products at the molecular level with a view towards defining targets for antiviral agents and designing hybrid viruses that may be used in animal models of viral disease. Ph.D. in Molecular Biology/Virology required. **Please refer to Position IS on C.V.**

Another position will involve the study of mechanisms of action and structure/function relationships of HIV and Herpes simplex virus regulatory proteins for antiviral development. Ph.D. in Molecular Biology/Virology required. **Please refer to Position MH on C.V.**

## PROTEIN BIOCHEMIST

You will study the molecular interaction of cytokines with their receptors. A Ph.D. in a relevant field and experience in protein isolation, protein chemical modification and immobilization of enzymes and/or antibodies. **Please refer to Position AS on C.V.**

## BIOCHEMIST/PHARMACOLOGISTS

We are seeking a Ph.D. Biochemist to investigate *in vitro*

and *in vivo* actions of fatty acid oxidation inhibitors in normal and ischemic/reperfused hearts. **Please refer to Position AH on C.V.**

Another position will require a Ph.D. Biochemist or Pharmacologist/Physiologist to examine changes in signal transduction in animal models of cardiovascular disease such as heart failure or ischemic heart disease. **Please refer to Position AH on C.V.**

## ORGANIC BIOCHEMIST

Scientist to work on the design and synthesis of modified peptides and small molecules to increase their transport across cell membranes. Ph.D. in Chemistry with skills in synthesis and analytical techniques of gel filtration, ion exchange chromatography and reverse phase HPLC. **Please refer to Position PR on C.V.**

## MOLECULAR BIOLOGIST/ BIOCHEMIST

You will study the role of oligosaccharide structures on cell surface receptors. Emphasis on characterizing the carbohydrate structures and their significance for expression, ligand binding and signalling. A relevant Ph.D. with experience in Molecular Biology is required. **Please refer to Position JH on C.V.**

## BIOCHEMIST

You will study the mechanism of action of inhibitors of stromelysin and/or phospholipase A<sub>2</sub>. Studies will involve intracellular regulation, expression and characterization of these enzymes. Ph.D. in Biochemistry, Molecular Biology or Molecular Pharmacology preferred. **Please refer to Position JC on C.V.**

Hoffmann-La Roche offers the benefits of a multidisciplinary environment that stimulates personal and professional growth, and encourages publications. In addition, we are conveniently located in an attractive suburban community just 10 miles west of New York City and its cultural and intellectual resources. Our salaries and benefits package are highly competitive.

For consideration, please send your curriculum vitae and the names of three references, indicating the code for your position of interest, to: **Mr. R.H. Stevenson, Assistant Director, Exploratory Research, Hoffmann-La Roche Inc., Nutley, New Jersey 07110.** We are an equal opportunity employer.



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## SOIL FERTILITY SPECIALIST

**Organization** ICARDA, one of 13 international centers supported by the Consultative Group on International Agricultural Research, cooperates with national programs in West Asia and North Africa (WANA) to develop sustainable improvements in dryland cereals, food legumes, farm resource management, pasture, forage, and livestock production. ICARDA's multi-disciplinary staff of over 60 senior scientists and 600 technical and support personnel has an international mandate for barley, faba bean, and lentil production improvement and a regional mandate for wheat and chickpea production improvement, farming systems research and the sustainable management of soil, water and natural vegetation resources.

**Position** The **SOIL FERTILITY SPECIALIST** works within ICARDA's Farm Resource Management Program and is responsible: for the running of the ICARDA Soil Laboratory, which undertakes chemical analyses of soil and plant samples from research trials; for maintaining a research program in soil fertility; for certain training activities in areas of analytical techniques and soil fertility research; and for liaison with national scientists to strengthen and coordinate fertility research across the WANA region. The latter activity requires some travel and the organization of workshops.

**Qualifications** Earned Ph.D. in soil chemistry or soil fertility, with at least 10 years field research experience, part of which should have been in developing countries; capability and willingness to work collaboratively in a multidisciplinary and multinational context; fluency in spoken and written English. Teaching experience, and capability in the French and/or Arabic languages would be advantages.

**Post** The position reports to the Leader, Farm Resource Management Program, and is based at ICARDA's modern headquarters and main research station located in a rural setting 35 km from Aleppo, Syria.

**Benefits** Salary paid in US dollars based on experience and qualifications. Benefits include housing allowance, paid home leave travel, a retirement and health package, provided auto, free enrollment for dependents at the ICARDA-administered international school (K-12), and other internationally competitive conditions of service.

**Application** Qualified applicants are invited to send:

- 1) a curriculum vitae with recent salary history;
  - 2) names, addresses, and telex numbers of three professional referees;
  - 3) photocopies (non-returnable) of other relevant supporting documents.
- to: Dr. Aart van Schoonhoven, Deputy Director General (Research)  
ICARDA, P.O. Box 5466, Aleppo, Syria  
Telex: 331206 ICARDA SY, or 331263 ICARDA SY  
Telephone: (963-21) 213433, 213477, or 234890

**Reference:** Please quote position no. DG/21/90 on application.

**Application deadline:** 31 Jan 1991

*ICARDA is an equal opportunity employer.*

## Postdoctoral Scientist in Toxicology/Computer Simulation

The Chemical Industry Institute of Toxicology (CIIT) is an independent, not-for-profit research corporation. Our mission is to improve the scientific basis for understanding and assessing the potential adverse effects of chemicals, pharmaceuticals, and consumer products on human health. We are currently seeking a postdoctoral scientist to work on biologically based simulation models of chemical toxicity.

The successful candidate will be responsible for development of quantitative descriptions of chemical and biological events comprising the toxic effects of chemicals. These descriptions are implemented as simulation models which are intended to play a major role in experimental design, data interpretation, and chemical risk assessment. The position requires significant quantitative skills and expertise in computer programming. Training in chemistry and biology is also desirable. Development of close working relationships with laboratory-based scientists will be necessary. Conduct of laboratory investigations supporting model development will be encouraged. The individual must have a doctoral degree in a relevant discipline such as mathematics, chemical engineering, computer science, or in a biomedical discipline with an emphasis on quantitative methods.

CIIT is located in Research Triangle Park, NC which offers many cultural and recreational activities as well as access to 3 major universities. We offer competitive salary and benefits and a stimulating work environment. Interested applicants should submit a curriculum vitae and the names of three professional references, representative reprints and a summary of research interests to: **Human Resources Manager, CIIT, P.O. Box 12137, Research Triangle Park, NC 27709.**



An Equal Opportunity Employer M/F

## SENIOR TOXICOLOGIST

### Contribute to excellence in Environmental, Health and Safety Affairs

Fortune 100 Hoechst Celanese Corporation, one of the world's largest producers of chemicals and pharmaceuticals, has an exceptional opportunity for a Senior Toxicologist in its Corporate Department of Environmental, Health and Safety Affairs.

In an interactive role, selected candidate will provide Toxicological consultation and guidance to the business units and advise senior management on toxicology issues. You'll participate in risk assessments on environmental and product safety issues. Will also assist in developing and publishing toxicology information in support of marketing strategies and serve as a resource for the business units' safety, industrial hygiene and environmental functions.

Qualifications include 6 or more years experience in industrial toxicology and a PhD degree in Toxicology or a related field.

Located at our modern corporate complex in a pleasant suburban setting, this position provides an excellent salary with a flexible benefits program and a company Performance Sharing Plan. For prompt consideration, please send your resume with salary history/requirements to: D116, Human Resources Department, Hoechst Celanese Corporation, Routes 202-206 North, Somerville, NJ 08876. An affirmative action employer M/F/H/V.

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## ACADEMIC RESEARCH ENHANCEMENT AWARD

The Academic Research Enhancement Awards (AREAs) provide funding for feasibility studies, pilot studies and other small-scale health related research projects. Awards are made in amounts of up to a total of \$75,000 in direct costs (plus applicable indirect costs) for a period of up to three years; however, no more than \$35,000 in direct costs may be awarded for any one year.

### Eligibility Requirements

#### 1. Applicant Institutions

All domestic institutions offering baccalaureate or advanced degrees in the sciences related to health are eligible, except those that have received an NIH Biomedical Research Support Grant (BMSG) of \$20,000 or more per year for four or more years during the period from FY 1984 through FY 1990.

#### 2. Applicant Principal Investigators

Must not have active research grant support (including an AREA) from either NIH or the Alcohol, Drug Abuse and Mental Health Administration (ADAMHA) at the applicant institution at the time of award of an AREA grant.

May not submit a regular NIH or ADAMHA research grant application for essentially the same project as a pending AREA application.

Are expected to conduct the majority of their research at their own institution, although limited access to special facilities or equipment at another institution is permitted.

May not be awarded more than one AREA grant at a time nor be awarded a second AREA grant to continue the research initiated under the first AREA grant.

### Award Criteria

Funding decisions are based on the research project's scientific merit and relevance to NIH programs, and the institution's contribution to the undergraduate preparation of doctoral-level health professionals. Among projects of essentially equivalent scientific merit and program relevance, preference will be given to those submitted by institutions that have granted baccalaureate degrees to 25 or more individuals who, during the period 1980-1990, obtained academic or professional doctoral degrees in the health related sciences.

### APPLICATION RECEIPT DATE

June 22, 1991

Anticipated Number of Awards: Approximately 112 grants

For information and application materials, contact:

Office of Grant Inquiries  
Division of Research Grants  
National Institutes of Health  
Westwood Building, Room 449  
Bethesda, Maryland 20892  
(301) 496-7441

## DIRECTOR OF LABORATORY ANIMAL RESOURCES POSITION OPENING

Roswell Park Cancer Institute, an NCI-designated comprehensive cancer center with over 200 senior research faculty members, is seeking candidates for appointment as Director of Laboratory Animal Resources. As Institute Attending Veterinarian, the incumbent will be responsible for providing veterinary care for the Institute's laboratory animal programs to comply with federal, state and institute standards. This will include management and direction of a vigorous animal health surveillance program, review and development of animal research and surgery protocols, provision of veterinary support and educational services, and overall management of facilities and staff of the Department of Laboratory Animal Resources. The incumbent will play a central role in the design and planning of a new animal facility.

Candidates must 1) hold a D.V.M./V.M.D. degree from an accredited college of veterinary medicine, 2) be federally accredited and 3) be certified or eligible in the American College of Laboratory Animal Medicine. The incumbent will become part of a group of professionals engaged in service and basic research. Preference will be given to candidates who also hold an advanced degree in basic science or who have registered other scientific accomplishments. The successful candidate will be expected to contribute to the academic programs of RPCI. Send resume/c.v. with a statement of basic research experience, a listing of peer-reviewed publications and references to:



James P. Karr, Ph.D.  
Office of Scientific Administration  
Roswell Park Cancer Institute  
Elm and Carlton Streets  
Buffalo, New York 14263

*Roswell Park is an Affirmative Action Employer*

## SENIOR RESEARCH SCIENTIST

Miles Inc., a multi-divisional healthcare products company, has a challenging opportunity available for an experienced Clinical Pathologist in its Toxicology Department.

The person selected for this position will supervise the Clinical Pathology Laboratory and will be responsible for analysis, interpretation and reporting of blood chemistry, hematology and urinalysis data from toxicology studies.

Minimum requirements for this position include a degree in biology or biochemistry with 3-5 years experience in clinical pathology. A Ph.D. or DVM with ASCP or ACVP certification is desirable.

Located in Elkhart, Indiana, we offer varied recreational and educational facilities, as well as convenient access to the Chicago area. Excellent starting salary commensurate with experience, plus a superior benefits program. Please send a complete resume with salary history in confidence to:



E.R. Klimek  
Administrator, Productivity Services  
Department #361  
Miles Inc.  
A Bayer USA Inc. Company  
P.O. Box 40  
Elkhart, IN 46515

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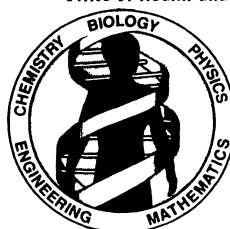
**Cellular Neurobiology/Biophysics and Ecology  
Faculty Positions  
BOSTON UNIVERSITY  
MARINE PROGRAM  
Marine Biological Laboratory  
Woods Hole, Massachusetts**



Applications and nominations are invited for two tenure-track faculty positions at the assistant/associate/full professor level for September 1991. We are seeking candidates who are using contemporary approaches to investigate problems in the general area of (1) **cellular neurobiology/biophysics** using marine organisms, and (2) **ecology** with a focus on the marine environment. Applicants should have a Ph.D., postdoctoral experience, a strong record of research accomplishments, and a strong research program. The Boston University Marine Program is based in Woods Hole, Massachusetts at the Marine Biological Laboratory. Successful candidates will be asked to teach a one-month course in the Woods Hole Marine Semester for graduate and advanced undergraduate students from Boston University and other universities, and a graduate course in the area of their expertise. These positions carry six months' salary per year. Substantial external funding is required in the research environment of Woods Hole. Applications should include a curriculum vitae, a summary of current and future research plans, and the names of at least three individuals as references. Application deadline is February 15, 1991. Send applications or nominations to: Chairman, Faculty Search Committee, BUMP/MBL, Woods Hole, MA 02543.

Women and minorities are encouraged to apply. Boston University is an equal opportunity, affirmative action employer.

U.S. Department of Energy  
Office of Health and Environmental Research



# Human Genome

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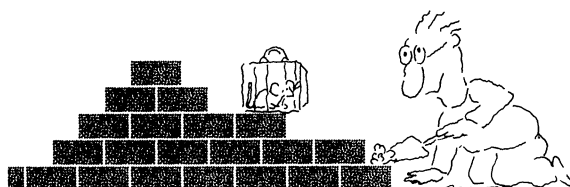
**The Dept. of Molecular Genetics  
and Cell Biology  
and the Dept. of Medicine  
The University of Chicago  
Program in Molecular and Cellular Basis  
of Microbial Pathogenesis and Infectious Diseases**

The Departments of Molecular Genetics and Cell Biology and of Medicine at The University of Chicago invite applications or nominations for a senior tenured position. Responsibilities include establishing a strong basic science program in the molecular or cellular biology of microbial pathogenesis and directing a modern clinical program in Infectious Diseases including molecular approaches to diagnosis and treatment. Suitable research areas include animal viruses, in particular retroviruses, and bacterial and fungal pathogens. The successful candidate will have the opportunity to head an interdepartmental program in Microbiology and Infectious Diseases. Send nominations or applications, including curriculum vitae, a statement of research interests and the names of three references to:

**Lucia B. Rothman-Denes**  
**Chair, Search Committee**  
Dept. of Molecular Genetics and Cell Biology  
**The University of Chicago**  
920 E. 58th St.  
Chicago, IL 60637

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Research Triangle Park, North Carolina

## CHIEF

### EXPERIMENTAL TOXICOLOGY BRANCH

The Division of Toxicology Research and Testing (DTRT) of the National Institute of Environmental Health Sciences, National Toxicology Program, Research Triangle Park, NC, is seeking applicants for the Chief, Experimental Toxicology Branch. The branch includes approximately 50 employees comprised largely of scientific personnel. The position has a salary range of \$59,216 to \$76,982. The successful candidate will be expected to: (1) Direct and coordinate efforts to initiate testing activities to characterize the biological-toxicological effects from acute, short-term repeated exposure, and subchronic exposure to chemicals; (2) Direct the organization and monitor the studies which are conducted principally through contacts supplemented by an intramural laboratory capability; (3) Direct laboratory research with a particular emphasis on research in toxicology, methods development and feasibility studies relevant to the development of research protocols for toxicological characterization of chemicals; (4) Play a major role in the formulation of DTRT objectives, plans, policies, and criteria. Candidates are required to have the following: Ph.D. degree or its equivalent in pharmacology, physiology, toxicology, or other allied subjects where training was focused on in vivo mammalian toxicology; Experience in managing and developing a broad spectrum of toxicology research and testing activities; Experience in supervision of a large staff comprised largely of scientific personnel; Independent research experience in toxicology, carcinogenesis, or pathology; A thorough knowledge of animal models used to investigate prechronic and chronic toxic effects of chemicals; Excellent written and oral communication skills; Relevant publications in scientific journals. U.S. Citizenship is required.

For further information, please call Ms. Norma Daye at (919) 541-7513. Applicants must be found to be eligible on a Civil Service Register. If interested, please send a curriculum vitae and three letters of reference by **February 28, 1991** to:

**Ms. Norma Daye (Code HNV-22)**  
**NIEHS Personnel Office**  
**P.O. Box 12233**  
**Research Triangle Park, NC 27709**



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## RESEARCH ASSOCIATE MOLECULAR BIOLOGY

**Amgen** has emerged as the recognized leader in the discovery and development of innovative human therapeutic products through applications of recombinant DNA technology. As a result of our ongoing commitment to excellence in research, we have an immediate opportunity for an experienced Research Associate to participate in the expression of recombinant proteins in prokaryotic systems.

Qualified candidates for this position must have a BS or MS in Molecular Biology, Biochemistry or a related discipline and a minimum of two years' experience in the cloning and expression of heterologous genes in prokaryotic systems.

**Amgen** offers a stimulating and challenging research environment in which scientists have the resources and support to develop their full potential. In addition to an excellent compensation and benefits package, Amgen also offers an attractive location northwest of Los Angeles free from the concerns typically associated with major urban areas.

If you have the necessary skills and would like to be a part of a company that places the highest value on its human resources, please send a resume, in confidence, to:

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# AMGEN

## POSITIONS OPEN

### BIOLOGY INSTRUCTOR FOOTHILL COMMUNITY COLLEGE

Primary areas of classroom instruction will include: organismic and evolutionary biology, multicellular life, environmental biology, and ecology/natural history. Secondary duties may include: introduction to molecular-chemical aspects of biology, human biology, biology of human reproduction, and marine biology. This position will also be responsible for student recruitment and advising, acting as a liaison between college and professional and/or educational biological organizations, participating in curriculum development and in college activities/committees. Evening classes may be part of the teaching load. M.A. in biology or equivalent. Emphasis in organismic and population biology or related field preferred. \$30,684.80 to \$49,706.80 annually plus benefits. Application and complete job description may be obtained from: **Employment Services, Foothill-De Anza Community College District, 12345 El Monte Road, Los Altos Hills, CA 94022. Telephone: 415-949-6217.** A résumé or curriculum vitae may not be substituted for a completed application. Open until filled with first review date of 28 January 1991. *Affirmative Action/Equal Opportunity Employer.*

### PHYSIOLOGIST, PHARMACOLOGIST, BIOCHEMIST

Applications are invited for full-time positions at the GS-12 level in the Physiology Branch, U.S. Army Medical Research Institute of Chemical Defense, Aberdeen Proving Ground, Maryland. Positions are available immediately for two scientists to join a group working on the development of concepts for prophylaxis and therapy against compounds that induce pulmonary edema. We are a multidisciplinary group, therefore, candidates with expertise in respiratory physiology, pharmacology, biochemistry, and/or immunology will be considered. An appropriate Ph.D. and U.S. citizenship is required and the applicant must be able to obtain a security clearance. Salary range is \$35,825 to \$46,571 depending upon qualifications. Résumés should be sent to: **Commander, USAAPGSA, Attention: STEAP-CP-RT (Ms. M. Boggs), Aberdeen Proving Ground, MD 21005-5001.** *Equal Opportunity Employer.*

## POSITIONS OPEN

### INSTITUTE OF BIOSCIENCES AND TECHNOLOGY TEXAS A&M UNIVERSITY

Texas A&M University is establishing the Institute of Biosciences and Technology (IBT) in the Texas Medical Center in Houston. The function of the IBT is to merge the strengths of the Colleges of Agriculture and Life Sciences, Veterinary Medicine, and Engineering with the scientific and clinical strengths with the Texas Medical Center. All **FACULTY** in the Houston IBT will have positions in academic departments in College Station. Academic rank is dependent upon experience and qualifications. Outstanding individuals having research interests dealing with a broad range of biomedical investigations are sought. The 11-story IBT building is scheduled for completion in September.

Applicants should send curriculum vitae, list of publications, a brief description of current and future research interests, and have three letters of reference sent to: **Dr. Robert D. Wells, Director, Institute of Biosciences and Technology, Texas A&M University, College Station, TX 77843-2128.**

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

### ECOLOGY/BOTANY

The Department of Biology at Gettysburg College invites applications for a 1-year sabbatical replacement beginning fall 1991. Candidates must have an earned doctorate by September 1991. The successful candidate will teach ecology, a botany course in his/her specialty, and participate in the introductory biology program. Gettysburg College is a highly selective liberal arts college located 1½ hours north of the Washington/Baltimore area. Submit description of teaching interests, curriculum vitae, and three letters of reference (with recommender's telephone numbers) to: **Biology Search Committee, Department of Biology, Gettysburg College, Gettysburg, PA 17325.** Applications received by 1 March 1991 will receive fullest consideration.

*Gettysburg College is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

## POSITIONS OPEN

### FACULTY POSITION AVAILABLE

Emory University School of Medicine is seeking a tenure-track faculty member at the rank of **ASSISTANT PROFESSOR** to participate in the activities of the Medical Genetics Division of the Department of Pediatrics. Candidates should have an M.D./Ph.D. or M.D. and be Board-eligible or -certified in clinical genetics, have experience in medical genetics and in molecular genetic research, and have potential to establish and maintain an active research program. Demonstrated teaching skills are also essential. Send current curriculum vitae and three letters of recommendation to:

**Louis J. Elsas, II, M.D.**  
Professor of Pediatrics  
Director, Division of Medical Genetics  
Emory University School of Medicine  
Pediatrics/Medical Genetics  
2040 Ridgewood Drive  
Atlanta, GA 30322

Deadline for submission of applications is 28 February 1991.

*Emory University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

### ASSISTANTSHIPS GRADUATE PROGRAM IN NEUROSCIENCE

The Neuroscience Program at College of Medicine at The Milton S. Hershey Medical Center of the Pennsylvania State University has assistantships available in August 1991. This interdepartmental program is designed to confer a Ph.D. degree with a major in neuroscience. Participating faculty have established research programs in molecular biology of the nervous system, neurophysiology, neuroendocrinology, behavioral science, neuropharmacology, neurovirology, and cerebral blood flow and metabolism. Interested candidates are invited to apply to: **Dr. Robert B. Page, Director, Neuroscience Program, P.O. Box 850, Hershey, PA 17033.**

*An Equal Opportunity/Affirmative Action Employer.*

## Postdoctoral Research Fellowship

### Biochemistry and Molecular Biology of Anticancer Drugs

The postdoctoral position will focus on the mechanism of action of novel anti-tumor drugs which are about to enter clinical trials and explore new cellular and molecular targets for anticancer drug design. These studies will include investigation of the signal transduction pathway, the interaction of the mitochondria with anticancer agents, and the isolation and characterization of cellular target proteins of anticancer drugs. The candidate will join a highly successful pre-clinical cancer research group which is part of a multidisciplinary effort to study the control and regulation of cellular proliferation. Applicants should be recent Ph.D. graduates in biochemistry, pharmacology or cell biology, and experience in in-vivo drug testing or molecular biology would be helpful.

Appointment is for one year, renewable for a second year. Compensation includes a \$32,000 annual salary with relocation expenses and an attractive benefits package. Our modern research facilities are located adjacent to the University of Michigan in an outstanding living and working environment. Send letter of application with curriculum vitae and names of three references to **Box JDM 3990, Human Resources, PARKE-DAVIS Research Division, Warner-Lambert Company, 2800 Plymouth Road, Ann Arbor, MI 48105.** "Smoke-Free Work Environment"

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## ASSOCIATE SCIENTIST POSITION

Position available for Associate Scientist (three years post-doctoral experience) and/or postdoctoral fellow. The successful applicant will be engaged in research on the biochemical and molecular mechanisms by which angiotensin peptides and other hormonal and pharmacological stimuli mediate cardiac muscle cell growth. There will also be the opportunity to engage in research defining the role of a localized intracardiac renin-angiotensin system in mediating cardiac muscle cell growth, with an emphasis on the regulation of the precursor genes for this system.

Competitive salary and fringe benefits are available. Please send CV and three names or letters of reference to:

**Dr. Kenneth M. Baker**  
Weis Center for Research  
Geisinger Clinic  
North Academy Avenue  
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## Geisinger

## POSITIONS OPEN

### FACULTY POSITION ECOLOGY OF FRESHWATER OR WETLAND INVERTEBRATES

Applications are invited for a 9-month tenure-track position at the **ASSISTANT PROFESSOR** level in the Department of Zoology and Wildlife Science at Auburn University (AU), effective 16 September 1991. Applicants must have a Ph.D. in biological science with an emphasis in freshwater or wetland invertebrate zoology, and must provide evidence of potential for teaching excellence. Postdoctoral experience is preferred. The position entails participation in teaching at the freshman level in a general biology program, participating in an undergraduate upper level course in invertebrate zoology, and developing graduate level coursework. The successful candidate will be expected to direct graduate students, to develop an externally funded research program, and to participate in position-related service activities. Salary will be commensurate with experience. Applicants should submit a letter outlining goals; curriculum vitae including training, experience, and list of publications (with selected reprints); academic transcripts; and three to five letters of reference by 15 March 1991 to: **Dr. John F. Pritchett, Head, Department of Zoology and Wildlife Science, Auburn University, AL 36849-5414. Telephone: 205-844-9228. FAX: 205-844-9234.** Members of minority groups and women are encouraged to apply. AU is an Affirmative Action/Equal Opportunity Employer.

### FACULTY POSITION IN MOLECULAR GENETICS

The Department of Biology at Queen's University invites applications for a tenure-track position in the area of molecular genetics. The applicant will be expected to interact with the insect biotechnology centre which is funded through the Federal Centres of Excellence Program.

**Qualifications:** The successful candidate should be an enthusiastic and competent teacher and will be expected to develop a vigorous research program. Qualifications include a Ph.D. degree and published evidence of excellent research ability.

**Expected date of appointment:** This appointment can be effective 1 July 1991 (or as negotiated) and is expected to be at the rank of **ASSISTANT PROFESSOR** with salary commensurate with qualifications.

**Application deadline:** The application deadline is 1 March 1991 or until a suitable candidate is selected. Applications (which should include curriculum vitae and statement of research interests) plus three letters of reference should be sent to: **Dr. David T. Dennis, Head, Department of Biology, Queen's University, Kingston, Ontario, Canada K7L 3N6.**

*In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Candidates of either sex are equally encouraged to apply. Queen's University is willing to help the spouse of a new appointee to seek employment.*

**PESTICIDE DATA REVIEW CHEMIST.** Ph.D. or M.S. degree level. To review industry pesticide residue data submissions for the Environmental Protection Agency. Opportunities to work in research laboratories. Salaries and benefits are competitive. Send résumé to: **Dr. Bruce Riggle, Acurex Corporation, 4915 Prospectus Drive, Durham, NC 27713.**

**POSTDOCTORAL POSITION.** Available immediately to study biochemical aspects of the regulation of transcription during *Xenopus* development. Previous experience in molecular biology and/or protein purification is preferred. Please submit curriculum vitae and names of three references to: **Dr. Martyn Darby, Fels Institute for Cancer Research and Molecular Biology, Temple University School of Medicine, 3420 North Broad Street, Philadelphia, PA 19140, or FAX: 215-221-4938.**

**POSTDOCTORAL POSITION.** Available summer 1991 to study the molecular biology of *Leishmania* viruses. Relevant experience in molecular biology and cell culture is desired. Appointment includes a position as a postdoctoral fellow in microbiology and molecular genetics of the Harvard Medical School. Send curriculum vitae and names of three references to: **Dr. Giovanni Widmer or Dr. Jean Patterson, Division of Infectious Diseases, Children's Hospital, 300 Longwood Avenue, Boston, MA 02115. FAX: 617-735-8387.**

## POSITIONS OPEN

### THE UNIVERSITY OF CHICAGO POSTDOCTORAL LECTURESHIP VERTEBRATE BIOLOGISTS

A 12-month position for 1991 to 1992 to begin anytime between July and September 1991 and renewable for one additional year. The successful candidate will share responsibility with departmental faculty for laboratory instruction and assistance in the department's human morphology course. This commitment requires about 150 contact hours (average 2.5 afternoons per week) over the fall and winter quarters. The successful candidate is expected to pursue her/his research interests with a departmental faculty member during the rest of the year. Applicants must have completed the Ph.D. and a course in human gross anatomy. Send curriculum vitae, statement of research interests, and three letters of reference to: **Dr. Philip S. Ulinski, Department of Organismal Biology and Anatomy, The University of Chicago, 1025 East 57th Street, Chicago, IL 60637.**

*The University of Chicago is an Equal Opportunity Employer. Women and members of minority groups are specifically encouraged to apply.*

## POSITIONS OPEN

### POSTDOCTORAL POSITION IN CANCER RESEARCH

Studies to investigate the cellular and molecular mechanisms that control differentiation, proliferation, and anticancer/cancer suppressor activity; how control of these processes is linked; and how defective linkages mediate carcinogenesis. References for studies on these topics from this laboratory include: *J. Cell Biol.* **109**, 1937-1946 (1989); *PNAS* **86**, 1652-1656 (1989); *Cancer Res.* **49**, 1008-1013 (1989); *J. Virology* **63**, 2718-2725 (1989); and *J. Cell Physiol.* **142**, 552-558 (1990). Candidates should have strong background in cell biology including tissue culture and in molecular biology and candidates should send their curriculum vitae, bibliography, and three letters of recommendation by 1 March 1991 to: **Dr. Robert E. Scott, Professor and Chairman, Department of Pathology, The University of Tennessee Medical Center, 800 Madison Avenue, 576 Baptist Main, Memphis, TN 38163.**

*The University of Tennessee, Memphis, is an Equal Employment Opportunity/Title IX/Section 504/Affirmative Action Employer.*

## Bring your Pharmacology talents to an industry leader for more opportunities and greater rewards.

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The successful candidate will be responsible for designing and monitoring the cardiovascular evaluations of our new compound entities in a variety of therapeutic areas. In addition, you will be responsible for making recommendations for and instituting new areas of research in our market niche. This will involve interaction with our Regulatory, Clinical and Marketing Staff as well as the FDA.

The ideal candidate will have a Ph.D. in physiology/pharmacology and a strong background in *in vivo* methodologies. Post-doctoral experience and a background in autonomic or respiratory function will be considered pluses. Please respond to Box RC.

### MS/BS Cardiovascular Pharmacology

The candidates we seek for these positions will be responsible for evaluating the cardiovascular and respiratory effects of new chemical entities. To qualify, you must have a MS/BS in a biological science, laboratory experience and surgical skills, and the ability to collect, analyze and report data using PC's and applied software. Please respond to Box JR.

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**Coastal Zone Chemist  
Salary \$34-\$57 K**

The Australian Institute of Marine Science seeks to appoint an experienced scientist to undertake fundamental and strategic research on chemical/geochemical factors influencing the structure and function of tropical coastal ecosystems, with particular emphasis on nutrient cycles and food chain processes. Program research activities focus on long-term, multidisciplinary studies of ecological processes in coastal wetlands, seagrass meadows and coastal reef communities.

For further information on the position and the Institute, please contact Dr Alistar Robertson, or the Personnel Manager by telephone +61 77 789211, facsimile +61 77 725852 or AIMS.AUSTRALIA/OMNET.

Applications close on 15th February, 1991.  
Send applications to:

The Secretary  
Australian Institute of Marine Science,  
PMB No. 3,  
Townsville MC, Q. 4810 Australia.

**AIMS**

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The Solar Energy Research Institute (SERI), located in Golden, Colorado, west of Denver, is the nation's primary federal laboratory for the study of renewable technologies and solar energy. Currently, we have the following opportunities available:

### Molecular Biologist

You will modify microbial genomes through recombinant DNA technology as well as compile and interpret experimental data for critical analysis by senior staff, publications and presentations. Other duties include preparing reagents, creating microbial strains and plasmids, and conducting literature research to evaluate methods and recommend applications.

This position requires a BS or MS in Molecular Biology, Microbiology/Biochemistry or equivalent and experience in recombinant DNA technology. Ref #E2320-704.

### Analytical Chemist

You will analyze biomass components and conduct literature and laboratory research to update analytical methodology, publications, and presentations. Other responsibilities include analyzing and reducing experimental data, preparing reagents and maintaining analytical equipment. You will also assist with pretreatment and biomass fractionation experiments.

To qualify for this position, you must possess a Bachelor's degree in Chemistry or Biochemistry with a concentration on analytical techniques. Ref.# E2320-705.

We offer an excellent compensation and benefit program. For immediate consideration, please send resume to: **Human Resources Office, Solar Energy Research Institute, 1617 Cole Blvd., Golden, CO 80401.**

**Women and minorities are encouraged to apply.  
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## NMR SPECTROSCOPIST

The Laboratory of Cellular and Molecular Biology of the National Institute on Aging, National Institutes of Health, is accepting applications for a spectroscopist for the In-vivo NMR Unit.

Research will include NMR methodologic studies not directly related to aging, studies of the effects of aging on skeletal muscle metabolism in humans, and small animal work oriented towards cardiac, pulmonary, and brain physiology and metabolism.

A Bruker Biospec 1.9T/31 cm spectrometer is available on-site in Baltimore. In addition, a high-field vertical wide-bore instrument is expected to be installed in mid-1991. The NMR facilities of the main NIH campus in Bethesda, as well as instrumentation at Johns Hopkins Medical School will also be available.

The appointment will be as a IRTA or Staff Fellow, and the salary will depend on experience and qualifications.

A position is also available for a technician.

Please send curriculum vitae and bibliography to:

**Dr. Richard Spencer**  
c/o Dr. Gunther L. Eichhorn  
Chief, Laboratory of Cellular  
and Molecular Biology  
NIH Gerontology Research Center  
4940 Eastern Avenue  
Baltimore, Maryland 21224



Further information can be obtained by contacting Dr. Eichhorn at (301) 550-1807.

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## DEPARTMENT OF THE ARMY OVERSEAS JOB VACANCY

### MATERIALS ENGINEER

**Applications are being accepted for the position of Materials Engineer at the U.S. Army Research, Development and Standardization Group (United Kingdom) in London, England. This is a Civil Service position at the GS-15 grade level with a salary range of \$59,216-\$76,982 per annum. (A 4.1% increase is proposed for January 1991.)**

The incumbent plans, directs and coordinates the materials science research and development programs of the Department of the Army in Europe and the Middle East. The research program is accomplished through contracts with educational institutions, research institutes and government and industrial laboratories. The incumbent encourages proposals for research in various fields of materials science including degradation and reactivity; effects of structure, defects and composition on materials properties; new methods of synthesis and processing; and new concepts in materials characterization. Makes decisions concerning the relative value of proposed and ongoing research projects. Establishes and maintains contact with the entire professional and scientific community of Europe identified with materials science research.

In addition to the basic requirement of a bachelor's or higher degree in engineering, applicants must have one year of specialized experience in materials engineering equivalent to the next lower grade in the Federal Service and a background in fundamental research. Applicants should possess (1) Ability to plan, direct and guide a research program in materials science; (2) Ability to evaluate research proposals for technical merit; (3) Advanced knowledge of materials science/engineering and evidence that technical competence has been maintained; and (4) Ability to interact effectively with other scientists, professional groups and management officials.

Applicants should submit a Standard Form 171, Application for Federal Employment (available at Federal Job Information Centers and Federal Personnel Offices) and a supplemental statement which addresses each qualification listed above to: **U.S. Army Research Office, ATTN: SLCIS-CP-AR, P.O. Box 12211, Research Triangle Park, NC 27709-2211.** For further information, call (919) 549-4212/4294. Applications must be received by January 31, 1991.

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## MOLECULAR BIOLOGISTS

DNX is an established leader in the emerging field of transgenic sciences, developing enhanced biological models and systems for use in drug discovery, chemical safety testing, transgenic pharmaceutical production, and livestock improvement. Career opportunities currently exist in our new research and development facilities in Princeton, New Jersey.

### RESEARCH SCIENTIST:

A position is available for a Ph.D. level scientist with at least 1-3 years post-doctoral training in biochemistry and protein purification. Good oral and written skills a must. Familiarity with large scale purification procedures preferred.

### RESEARCH ASSOCIATE:

Several openings exist for the BS or MS level scientist with 2-3 years experience in recombinant DNA technology, in vitro mutagenesis, mammalian cell culture, and/or protein purification.

DNX offers an excellent working environment and an ideal location (midway between New York and Philadelphia), as well as competitive compensation and a superior benefits package. Individuals interested in a challenging opportunity at an exciting and rapidly growing company are invited to submit a curriculum vitae or resume and the names of three references to:



**Employment Manager,  
303B College Road East,  
Princeton, NJ 08540**

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You will be responsible for a variety of histologic procedures, including light and electron microscopy, immunocytochemistry, and in situ hybridization histochemistry for studies of the central nervous system. Requires B.S. in Biology or Chemistry and a minimum of one year of histology experience.

We offer top salaries plus a comprehensive Flex Benefits program, including medical, dental, life and disability; tuition assistance, child care center and as of January 1, 1991 we will be completely smoke-free. We have our own TStop on the Orange Line. Please send resume to Paula Spizziri, New England Medical Center, 750 Washington Street, Box 795, Boston, MA 02111, or fax your resume to her at (617) 956-5003. We are an equal opportunity employer, m/f/h/v.



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BASF Bioresearch Corporation, a wholly owned subsidiary of BASF Corporation, committed to be one of the world's largest biomedical research facilities, and concentrating on development of treatments for cancer and immune system disorders, has immediate opportunities available for the following positions to contribute to our start-up phases.

### Sr. Scientist/Biochemist Cell Biologist

This senior level position requires a scientist capable of initiating research programs, and managing a laboratory to study the link between integral membrane proteins and their cytosolic second messengers. To qualify, you must have a PhD and preferably 2+ years of postdoctoral experience in membrane biochemistry and/or signal transduction. We are looking for relevant experience in protein characterization as it relates to structure/function relationships, and the ability to analyze enzyme/substrate interactions.

### Senior Scientist Oncology

Senior scientist to direct tumor cell differentiation and/or drug resistance research. Qualified candidates will have a PhD in pharmacology, molecular biology, or tumor biology, and preferably 2+ years of experience in oncology research.

### Research Assistants

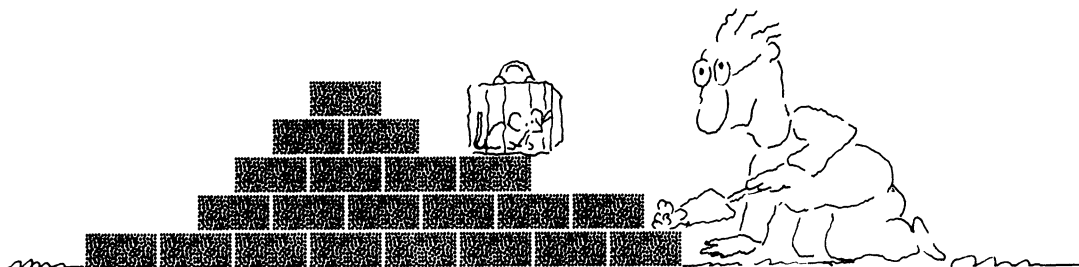
Positions in the following areas are available: molecular immunology, cellular immunology, molecular biology, and biochemistry. In most positions you will maintain the laboratory and lab equipment, conduct in-vivo and in-vitro studies, and standard laboratory testing. A BS degree in the appropriate science and laboratory experience are musts. MS is preferred.

Share The Spirit of Innovation that has fueled the growth of BASF for over 125 years. Our compensation and benefits program are representative of our industry leadership position. For prompt consideration, please forward resume and salary history to: Pamela S. Zupfer, Human Resources Department, BASF Bioresearch Corporation, 195 Albany Street, Cambridge, MA 02139. An Equal Opportunity Employer.

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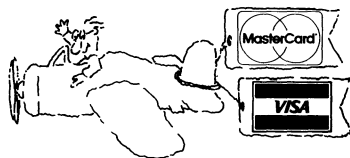
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Responsible for launching newly developed products and for developing marketing plans to continue to promote existing products. Responsibilities will also include, market analysis, technical writing, training, development of marketing communications tools for the sales team to effectively sell the products and interacting with customers. Sales experience in related fields is desirable. Ph.D./MS degree in molecular biology with 2+ years of laboratory experience is considered important. 30% traveling is expected.

#### Technical Product manager

Ph.D./MS degree in molecular biology or related disciplines with 2+ years of laboratory experience in molecular biology. Applicants should have good communication skills, proven technical writing skills and the ability to work independently. Responsibilities include market analysis, training of sales force and customer technical support. 30% traveling is expected.

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Applicants should have a BS/MS degree in molecular biology or related fields and 2+ years of lab experience in molecular biology. Prior sales experience is preferred, but not necessary. Sales territories are available in San Francisco, Philadelphia, St. Louis, Chicago and North Carolina.

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## POSITIONS OPEN

**POSTDOCTORAL POSITION IN MOLECULAR BIOLOGY.** Available immediately to study the molecular biology of complement proteins. Experience in cloning, sequencing, mammalian expression, and cell culture desirable. *Must be U.S. citizen or permanent resident.* Please send curriculum vitae and the names of three references to: **Dr. David C. Fritzinger, Department of Biochemistry and Molecular Biology, Georgetown University, 3900 Reservoir Road, N.W., Washington, DC 20007. An Equal Opportunity/Affirmative Action Employer.**

**PROTO-ONCOGENE POSTDOCTORAL.** NIH funded. Proto-oncogenes/regulatory factors in metamorphosis of marine invertebrate larvae. Prior experience proto-oncogene/oncogene molecular genetics/development required. Send curriculum vitae, summary previous research experience, copies relevant publications, names/telephones of three references: **Dr. Daniel Morse, Biochemistry-Molecular Biology Section, Department of Biological Sciences, University of California, Santa Barbara, CA 93106. Equal Opportunity/Affirmative Action Immigration Reform and Control Act Employer.**

### MOLECULAR EVOLUTION/SYSTEMATICS

**POSTDOCTORAL POSITION** available to study molecular evolution and phylogenetic relationships among avian orders. Candidates should have experience with molecular methods such as DNA sequencing and RFLP analysis. Send résumé and names and numbers of three references to: **Dr. David P. Mindell, Department of Biological Sciences, University of Cincinnati, Cincinnati, OH 45221-0006. Telephone: 513-556-9743. Equal Opportunity Employer.**

**POSTDOCTORAL POSITION IN FOREST ECOPHYSIOLOGY.** Available immediately to study woody plant competition. Experience in one or more of the following desirable: gas exchange, water relations, nutrient uptake, carbon allocation, biomass partitioning, below-ground processes, or growth and process modeling. Twelve-month appointment. Salary \$24,000 to \$26,000 plus benefits commensurate with experience. Two-year position with additional years contingent on continued funding. Send curriculum vitae, and the names of three references to: **Ms. Marjorie Gentry, School of Forestry, 118-C M. White Smith Hall, Auburn University, AL 36849-5418. Direct inquiries to: **Dr. Robert J. Mitchell; telephone: 205-844-1026. Auburn University is an Affirmative Action Equal Opportunity Employer. Minorities and women are encouraged to apply.****

### POSTDOCTORAL RESEARCH POSITION

Available immediately for molecular biologic studies of a human metastases-associated gene. Experience with cDNA cloning, YAC clones, DNA sequencing, and expression vectors is highly desirable. Mail or FAX application including curriculum vitae, a brief summary of previous training, experience, and research goals along with the names of three references to: **George D. Sorenson, M.D., Department of Pathology, Dartmouth Medical School, Hanover, NH 03756. FAX: 603-646-6120.**

### SCIENTIST: BIOLOGICAL ASSAYS

The Endocrine Unit at the Massachusetts General Hospital has an opportunity for a **POSTDOCTORAL SCIENTIST** (M.D., Ph.D., or D.V.M.) in our bone bioassay center. Ongoing studies involve actions of novel antagonist and agonist parathyroid hormone analogs on skeletal integrity and mineral ion homeostasis, and gene transfer models of osteoclastic bone resorption. Interested candidates with experience in *in vivo* and *in vitro* techniques in bone biology should apply to: **Samuel Nussbaum, M.D., Endocrine Unit, Massachusetts General Hospital, Boston, MA 02114. Massachusetts General Hospital is an Equal Opportunity Employer.**

### POSTDOCTORAL FELLOWSHIPS DRUG DISCOVERY

The Center for Drug Discovery, University of Florida, has an immediate availability of two NIH-funded postdoctorate positions. Individuals would study the chemistry, pharmacokinetics, and/or pharmacology of brain-specific drug delivery systems, as part of a large group of senior scientists, postdoctoral fellows, and graduate students. Send curriculum vitae and three letters of reference to: **Dr. James W. Simpkins, Box J-487, JHMC, University of Florida, Gainesville, FL 32610.**

## POSITIONS OPEN

**POSTDOCTORAL FELLOWSHIP.** Available for studies on the molecular basis of cell differentiation. Limited to those with recent Ph.D.'s. Prefer background in molecular biology. *Stanford is an Equal Opportunity Employer through Affirmative Action.* Send curriculum vitae and letters of reference to:

**Frank E. Stockdale, M.D., Ph.D.**  
Stanford University School of Medicine, M211  
Stanford, CA 94305-5306

**POSTDOCTORAL RESEARCH TRAINING FELLOWSHIPS** in the molecular and cellular pathology of cancer for M.D. or Ph.D. graduates are available at Temple University School of Medicine. The program offers specialized research training in the molecular basis of normal and abnormal cell proliferation and the molecular genetics of cancer utilizing the facility and resources of the Fels Research Institute for Cancer Research and Molecular Biology. *Must be U.S. national or permanent resident.* Send curriculum vitae, statement of research and career objectives, and two letters of reference to: **W. Edward Mercer, Ph.D., Program Director, Department of Pathology, Temple University School of Medicine, 3400 North Broad Street, Philadelphia, PA 19140. An Equal Opportunity/Affirmative Action Employer.**

### DREXEL FELLOWSHIPS IN BIOMEDICAL ENGINEERING AND SCIENCE

Drexel Fellowships in Biomedical Engineering and Science are supported by the Calhoun Endowment. Students can specialize in the following areas: artificial organs, bioinstrumentation, biomedical imaging and signal processing, biomedical science, biomaterials, biomedical systems and control, cardiovascular dynamics, diagnostic ultrasound, sensors and electrodes, biomechanics, and rehabilitation. Each fellowship includes a minimum stipend of \$10,000 for a 12-month appointment beginning fall 1991. With a waiver of all tuition and fees this award is worth approximately \$22,000. Deadline for application is 28 February 1991. For application, write: **Dr. Dov Jaron, Director, Biomedical Engineering and Science Institute, Drexel University, Philadelphia, PA 19104.**

**COLUMBIA UNIVERSITY.** Institute of Human Nutrition and Specialized Center of Research in Arteriosclerosis.

**STAFF ASSOCIATE.** Biochemist/cell biologist. To supervise and participate in a research program to isolate and characterize membrane-bound proteins and elucidate their roles in cellular metabolism. Applicants must have at least 2 years of postdoctoral research experience.

**POSTDOCTORAL FELLOWSHIP.** In a training program in arteriosclerosis research which includes studies of lipoprotein metabolism, endothelial cell biology, nutrition and vitamin metabolism. *Columbia University takes affirmative action to ensure equal opportunity.* Send curriculum vitae to: **Mr. Stan More, SCOR Administrator, Institute of Human Nutrition, 630 West 168th Street, New York, NY 10032.**

### CENTERS FOR DISEASE CONTROL IMMUNOLOGIST, MALARIA BRANCH, DPD, CID

The Division of Parasitic Diseases, Malaria Branch, Center for Infectious Diseases, Centers for Disease Control (CDC) is seeking to fill a **STAFF FELLOW/SENIOR STAFF FELLOW** position. The appointment will be at the GS-11 or GS-12 level (salary range \$29,891 to \$39,407) depending upon prior experience for up to 3 years. The successful candidate should have research experience in immunology and should complement the molecular biologic work on human and non-human malaria parasites. The successful candidate should have a Ph.D. or equivalent degree which relates to parasite biology/immunology. Candidates with degrees in other fields but with background and experience in immunology will be seriously considered. Interested applicants should send curriculum vitae, statement of research interests, and three letters of recommendation to: **Centers for Disease Control, Malaria Branch, DPD (Mail Stop F12), 1600 Clifton Road, Atlanta, GA 30333.** For additional information, call: **Dr. Altaf Lal; 404-488-4079. CDC is an Equal Employment Opportunity Employer and provides a smoke-free work environment.**

## POSITIONS OPEN

### POSTDOCTORAL FELLOWSHIP

To study eicosanoid and cytokine interrelationships in the pulmonary alveolar macrophage. Background in arachidonic acid metabolism preferred. Cell culture experience, immunoassay, and HPLC experience desirable. Send curriculum vitae to: **Dr. Laurence M. Demers, Department of Pathology, The M. S. Hershey Medical Center, Pennsylvania State University, Hershey, PA 17033. An Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

### POSTDOCTORAL FELLOWSHIPS ENDOCRINOLOGY, METABOLISM AND NUTRITION

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### THREE-YEAR POSTDOCTORAL FELLOWSHIP IN TROPICAL BIOLOGY AT THE SMITHSONIAN TROPICAL RESEARCH INSTITUTE

The Smithsonian Tropical Research Institute (STRI) invites applications for a 3-year postdoctoral fellowship in tropical biology (ecology, evolution, behavioral ecology, and human ecology) to start no earlier than July 1991. The institute is a bureau of the Smithsonian Institution in the Republic of Panama. The successful candidate is expected to base his/her research at one of the institute's research facilities. Proposals that include comparative research in other tropical countries will be considered.

Applications should include a detailed research proposal (less than ten pages), curriculum vitae, two letters of reference, names and telephone numbers of three additional professional references, and reprints of most important papers. Annual beginning stipend is \$22,000 with \$5,000 for travel and research support for the first year. Finalists may be invited to Panama for an interview. Send application by 15 February 1991 to:

**Three-Year Fellowship Search Committee  
Smithsonian Tropical Research Institute  
APO Miami, FL 34002-0011**

*Awards are based upon merit, without regard to race, color, religion, sex, national origin, age or condition of handicap of the applicant.*

### POSTDOCTORAL AND GRADUATE STUDENT FELLOWSHIPS

The University of Cincinnati College of Medicine offers a modern interdepartmental training program in environmental molecular and cellular carcinogenesis and mutagenesis. Cincinnati is a leading academic and industrial center for environmental studies providing numerous employment opportunities. Experimental approaches within the program include the role of growth factors and oncogenes in cellular transformation, the use of transgenic cells and animals, and molecular toxicology. Participating faculty are: **Dr. Roy Albert** (carcinogenic mechanisms and risk assessment), **Dr. Stuart Baxter** (tumor promotion), **Dr. Michael Lieberman** (growth factors and differentiation), **Dr. John Loper** (P450 systems in yeast), **Dr. Steven Potter** (insertional mutagenesis in transgenic mice), **Dr. Howard Shertzer** (chemoprevention of carcinogenesis), **Dr. Peter Stambrook** (mutagenesis in transgenic cells and mice), **Dr. Edward Stavnezer** (oncogenes and cell transformation), **Dr. James Stringer** (recombination and gene targeting in ES cells), and **Dr. David Warshawsky** (mechanisms of chemical carcinogenesis).

Positions are immediately available and are funded through a national research training program. Applicants must have U.S. citizenship or permanent residency and have completed a Ph.D. degree or equivalent. Candidates should send curriculum vitae and three letters of recommendation to: **Dr. Peter J. Stambrook, Department of Anatomy and Cell Biology, University of Cincinnati College of Medicine, Cincinnati, OH 45267. An Equal Opportunity/Affirmative Action Employer.**



## Cardiovascular Research

# Postdoctoral Scientist

CIBA-GEIGY Pharmaceuticals Division, headquartered on 100 acres in Summit, New Jersey, is respected worldwide for cardiovascular research and the development of products to treat cardiovascular disorders.

We are seeking a Postdoctoral Scientist to join our multi-disciplinary team studying the molecular and cellular pathology of myocardial ischemic-reperfusion injury. Candidates must possess a PhD in Biochemistry, Cell Biology, Pharmacology or Molecular Biology. Extensive experience with the analysis of receptor-effector systems and intermediary metabolism, mammalian tissue culture, tissue fractionation and enzymology, as well as various chromatographic and electrophoresis techniques, is highly desirable. As a Postdoctoral Scientist, participation in scientific forums and publication of research findings is expected.

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### Markey Graduate Fellowships in Molecular Biology University of Vermont Department of Microbiology and Molecular Genetics Markey Center for Molecular Genetics

The Graduate Program in the Department of Microbiology and Molecular Genetics offers intensive training in molecular biology and molecular genetics. We are a young department that has recently undergone a major expansion. We recently were awarded a 1.8 million dollar grant from the Lucille P. Markey Foundation to establish a Center in Molecular Genetics, and will occupy a new research building in 1992. *All Ph.D. students are supported by research or teaching fellowships.* The graduate program offers exciting research projects and a dynamic faculty. **Areas of research** include transcription by RNA polymerase II (E. BATEMAN), ribozymes and self-splicing RNA (J. BURKE), molecular aspects of adhesion and invasion (P. FIVES-TAYLOR), biochemistry and regulation of mRNA processing (G. GILMARTIN), genetic control of cellular polarity in yeast (D. JOHNSON), cell-cell interactions in yeast mating (J. KURJAN), DNA damage and repair mechanisms (S. WALLACE, Y. KOW, R. MELAMEDE), genetics of diphtheria toxin resistance and virus-cell interactions (T. MOEHRING, J. MOEHRING), molecular biology of fungal mating and development (C. NOVOTNY, C. RAPER), transcription of chromatin (D. PEDERSON), regulation of HIV transcription (K. PRATT), in vitro carcinogenesis (W. SCHAEFFER), and environmental microbiology (R. SJOGREN). *Postdoctoral fellowships are also available.*

Burlington is a small and lively city offering abundant cultural and recreational opportunities, located on the shore of Lake Champlain between the Green Mountains and the Adirondacks. **For application forms and further information contact:**

Dr. David Pederson  
University of Vermont  
Department of Microbiology and Molecular Genetics  
Health Science Complex  
Burlington, VT 05405  
Tel: (802) 656-2164  
FAX: (802) 656-8749

## POSTDOCTORAL POSITION AVAILABLE

The Section of Clinical Brain Research in the Laboratory of Clinical Studies, National Institute on Alcohol Abuse and Alcoholism (NIAAA) has an opening for a behavioral scientist with an interest in behavioral genetics. We expect the successful applicant to develop techniques to research into the neurobiology of anxiety and aggression in mice. A Ph.D. or M.D. or equivalent degree with a background of research and training in ethology is preferred.

Candidates may be non- or U.S. citizens and have completed their doctorate training with no more than 3 years postdoctoral experience. Stipends begin at \$25,000 but may be adjusted depending on the candidate's postdoctoral experience. Appointment would be as an Intramural Research Training Associate (IRTA) or Fogarty Visiting Fellow.

The Laboratory is located on the campus of the National Institutes of Health, Bethesda, Maryland. If you have an interest in this position, send a letter describing yourself and include a statement of scientific interest, a resume, and the names of three references to:

**Richard G. Lister, Ph.D.**  
**Laboratory of Clinical Studies**  
**NIAAA/NIH**  
**Building 10, Room 3C102**  
**9000 Rockville Pike**  
**Bethesda, Maryland 20892**



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## POSITIONS OPEN

### MOLECULAR BIOLOGIST/ NEUROPHARMACOLOGIST ALCOHOL RESEARCH

The Psychiatry Department and Alcohol Research Center at the University of North Carolina (UNC) are seeking applicants for a **RESEARCH ASSOCIATE** position in molecular neuropharmacology. We are seeking a candidate who has applied techniques of molecular genetics to investigate the mechanisms of alcohol action in the CNS. The ideal candidate will have a background in receptor/second messenger systems as well. A doctorate in molecular biology and several years of postdoctoral experience in neuroscience or pharmacology are required. Candidates should have published work in the molecular biology of alcoholism and demonstrated the ability to compete for research awards. Position is available 1 July 1991. Send curriculum vitae, descriptions of research accomplishments, and the names and addresses of three references to: **A. Leslie Morrow, Ph.D., Department of Psychiatry, CB 7175, University of North Carolina, Chapel Hill, NC 27599.** Women and minorities are especially encouraged to apply. UNC is an Affirmative Action/Equal Opportunity Employer.

**RESEARCH ASSOCIATE.** To design and conduct basic experimental research using vacuum ultraviolet spectroscopy, photoionization processes, mass spectroscopy, and synchrotron radiation; travel to synchrotron center at University of Wisconsin three to four times per year to collect data using synchrotron radiation equipment. Ph.D. in atomic and molecular physics plus coursework or in-the-laboratory, hands-on experience with photoion and photoelectron spectroscopy, mass spectrometry, and synchrotron radiation; at least one publication. Forty hours per week; \$20,000 per year. Send résumé to: **Mr. Bernie Childerston, Nebraska Department of Labor, Box 94600, Lincoln, NE 68509.** Refer to: **Job Order #520237.**

The Laboratory of Molecular and Biochemical Genetics of the Department of Pediatrics is seeking a **RESEARCH ASSOCIATE** to participate in a study of patients and families with inherited deficiency in the branched chain alpha-ketoacid dehydrogenase. Clinical research includes studies of disease diagnosis and management, interaction with families in the design and implementation of in vivo experiments to evaluate whole body oxidation of Leucine-1-<sup>13</sup>C to <sup>13</sup>CO<sub>2</sub>. Position requires a Ph.D. or equivalent degree with at least 1 year of general clinical experience, preferably 1 year of clinical research training experience, and skills with standard enzyme assays of cultured cells and Western blotting analysis. Didactic course work during the doctorate training should include basic courses in biochemistry, anatomy, microbiology, pharmacology, physiology, enzyme assays, and Western blot analysis. Starting annual salary range of \$20,000 to \$25,000. Send curriculum vitae to: **Georgia Department of Labor, 1275 Clarendon Avenue, Avondale Estates, GA 30002** or to the nearest Georgia Job Placement Center. **Job Order # GA5462859.**

**RESEARCH SCIENTIST.** The College of Arts and Sciences is seeking a scientist with experience in electron microscopy and/or mass spectrometry to supervise a core analytical facility including two electron microscopes, two GC/MS units, a Sun workstation, and support equipment. Opportunities to pursue own research. Ph.D. preferred. Competitive salary. 15 minutes from Washington, D.C. Submit curriculum vitae and three letters of reference no later than 4:30 p.m., 15 February 1991. Contact: **Human Resources Department, George Mason University, Fairfax, VA 22030.** Affirmative Action/Equal Employment Opportunity.

The University of California, San Diego (UCSD), is seeking a Ph.D. applicant for a **POSTGRADUATE RESEARCHER (PGR)**. Candidates should have experience in molecular biology and retrovirology or herpesvirology to conduct research in AIDS pathogenesis and the role of viral cofactors. Position available immediately for at least 2 years. Salary range based on University of California policy. Interested individuals should send curriculum vitae with a list of three references no later than 30 June 1991 to: **Stephen A. Spector, M.D., Professor, Department of Pediatrics and Center for Molecular Genetics, UCSD Medical Center, 225 Dickinson Street (H-814-H), San Diego, CA 92103.** Equal Opportunity/Affirmative Action Employer.

## POSITIONS OPEN

### THE UNIVERSITY OF QUEENSLAND DEPARTMENT OF PHYSIOLOGY AND PHARMACOLOGY RESEARCH OFFICER/ SENIOR RESEARCH OFFICER (TWO POSITIONS)

We are seeking neuroscientists (or electrical engineers) to join a team working on the characteristics of autonomic neurones and their response to damage. Applicants should have research interests in synaptic mechanisms, neural connectivity, and/or development and regeneration.

Experiments involve primarily in vitro studies on central and peripheral neurones. Postdoctoral experience in electrophysiological recording, intracellular dye techniques, immunohistochemistry, and/or computer modeling of neurones is preferred. Appointment to 31 December 1991 in the first instance, with renewal possible to end of 1994. Salary: research officer, A\$28,792 to \$32,762; senior research officer, A\$33,163 to \$37,420.

For further details, please contact: **Professor E. M. McLachlan, 61-7-377-3133**, or **Dr. J. R. Keast, 61-7-377-4524.** Send written applications to: **Professor E. M. McLachlan, Department of Physiology and Pharmacology, University of Queensland, Queensland 4072, Australia.** Closing date: 31 January 1991. Ref. No. 60790.

### OPPORTUNITIES IN TRANSPLANTATION THERAPY

**TRANSPLANTATION IMMUNOLOGIST, Ph.D.** and postdoctoral experience in immunology, understanding and manipulation of immunological reactions to transplanted allogeneic and xenogeneic tissue, implants, and foreign bodies.

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### ASSOCIATE IN CLINICAL MEDICINE

Position in Division of Metabolism and Nutrition, Columbia University (Columbia Presbyterian Medical Center). Responsibilities include care of patients with lipid disorders; coordination of clinical drug trials with lipid lowering agents; supervision of residents and students in lipid clinic. Applicants must be Board-certified in internal medicine and have significant experience in the design and conduct of clinical trials in the field of lipid metabolism. Salary: \$35,000. *Columbia University takes Affirmative Action to ensure Equal Opportunity.* Contact: **Henry Ginsberg, M.D., Columbia University, College of Physicians and Surgeons, 630 West 168th Street, New York, NY 10032.**

### CANCER RESEARCH

Full-time position for Ph.D. or research-oriented physician to perform bench-related oncology research. Prefer individual interested in biological response modifiers but may consider other medical oncology-related research interests. Postdoctoral experience and demonstrated research potential are required. Please submit curriculum vitae, letter detailing research goals, and names of three references to: **David R. Pieper, Ph.D., Director of Physiology and Research, Providence Hospital, Southfield, MI 48037.**

**IMMUNOLOGICAL RESEARCHER.** For northwestern Ohio hospital to perform medical research in the field of immunology. No experience required in above duties but applicants will qualify with an M.D. in medicine and 2 years of experience as a research fellow [experience must be in the field of enzyme linked immunosorbent assays (ELISA) for fibrinogen and assay evaluation and procedure modification for ELISA, radioimmuno assay (RIA), and competitive enzyme linked immunoassay (CELIA) techniques]. Monday to Friday, 7 a.m. to 4 p.m.; \$2030.63 per month. Must have proof of legal authority to work permanently in the United States. Send résumé in duplicate (no calls) to: **J. Davies, JO#1153370, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

## COURSES AND TRAINING

### BIOLOGY OF DISEASE VECTORS 19 JUNE TO 3 JULY 1991 COLORADO STATE UNIVERSITY (CSU) FORT COLLINS, COLORADO

This unique course introduces students to the biology of vectors of infectious diseases, emphasizing current molecular biological, genetic, biochemical, and physiological research. Important aspects of vector biology, including host seeking, blood feeding, organ structure-function, gene regulation, vector manipulation and containment, and control, will be covered and followed by in depth analyses of selected major vector-borne diseases systems. Faculty are from the MacArthur Foundation Network on the Biology of Parasite Vectors.

The course is designed for advanced graduate students, postdoctoral fellows, and independent investigators. The course can be taken for college credit. Accommodations are located on the main campus of Colorado State University, near lecture and laboratory facilities. Vector-pathogen experimentation and demonstrations will be conducted in the containment facility of the Arthropod-borne and Infectious Diseases Laboratory of the CSU Foothills Campus.

Limited to 30 students. Enrollment is competitive. Financial aid is available. Application deadline is 1 March 1991. For information and application forms, contact: **Dr. William Marquardt (telephone: 303-491-5994)** or **Dr. Barry Beaty (telephone: 303-491-8604), AIDL, Foothills Campus, Colorado State University, Fort Collins, CO 80523.**

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## **Biochemistry**

**Principal Scientist**—Will lead a team of physical biochemists conducting structural research on recombinant cytokines and their receptors, and will apply these findings to the rational design of novel therapeutic agents. A Ph.D. in Biochemistry or related discipline is essential coupled with 5-8 years' relevant post-doctoral experience. A strong background in physical and analytical protein chemistry, a good understanding of 3-dimensional protein structure, and outstanding communication skills are also required. Experience with molecular modeling of protein/polypeptides, as well as with technologies such as multi-dimensional NMR spectroscopy that can directly define the 3-dimensional structure of proteins would be a definite plus. Ref. #88-86.

**Sr. Scientist**—Will design novel therapeutic agents through structural definition of cytokines and their receptors using physical-biochemical techniques. Requires a Ph.D. in Physical Biochemistry or related field together with 0-4 years' relevant post-doctoral experience. Special attention given to candidates with a background in characterization of protein structure and dynamics using heteronuclear NMR spectroscopy methods, or experience in structural analysis of oligosaccharides derived from proteins. Ref. #89-61.

**Post Doctoral Scientist**—This position will investigate the structure of cytokines, their receptors and related polypeptides by employing NMR spectroscopy methods. You will present these findings at national meetings and in peer-reviewed journals. Requires a Ph.D. in Biochemistry or related discipline coupled with a background in protein

chemistry, NMR spectroscopy and distance geometry methods. Experience in multi-dimensional analyses of isotopically labelled proteins and peptides would be ideal. Ref. #90-20.

## **Cell Biology**

**Sr. Scientist**—This unique position will focus on *in-vitro* and *in-vivo* Cytokine Biology. A Ph.D. in Immunology or Cell Biology with 0-4 years' post-doctoral experience is required. Desired qualifications include proven expertise in Cytokine Interaction in the development of Haematopoietic Progenitor cells and mature lymphocytes. This position offers the rare opportunity to work with a multidisciplinary team comprised of cell and molecular biologists. Ref. #90-63.

## **Molecular Biology**

**Post Doctoral Scientist**—You will be part of our highly collaborative lymphokine antagonist program, with research focused on cloning and expression of the immunoglobulin repertoire. This will involve a multidisciplinary approach involving cell culture, cDNA cloning using the polymerase chain reaction, construction of antibody chimeras, and heterologous gene expression in *E. coli* and/or mammalian cells. Requires Ph.D. in Molecular/Cell Biology, Immunology, Biochemistry or related field. Familiarity with recombinant DNA/genetic engineering technology preferred. Ref. #90-19.

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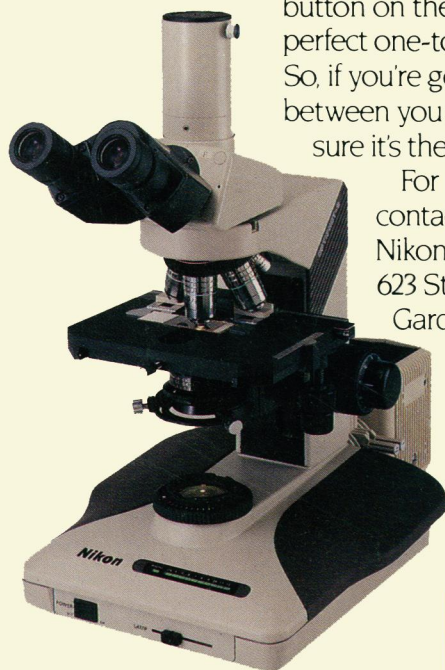
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