
Congressional Science and Engineering Fellowships 1991-92

PROGRAM: Fellows spend one year working as special assistants on the staffs of members of Congress or congressional committees, working in legislative areas requiring scientific and technical expertise. The program includes an orientation on congressional and executive branch operations and a year-long seminar program on issues involving science and public policy. Fellows receive stipends from their sponsoring societies.

PURPOSE: To provide a unique public policy learning experience, to demonstrate the value of science-government interaction, and to make practical contributions to the more effective use of scientific and technical knowledge in government.

CRITERIA: A prospective Fellow must be a postdoctoral to mid-career scientist or engineer; demonstrate exceptional competence in some area of science or engineering; be cognizant of many matters in nonscientific areas; demonstrate sensitivity toward political and social issues; and perhaps most important, have a strong interest and some experience in applying personal knowledge toward the solution of societal problems.

SPONSORS: Nineteen national professional scientific and engineering societies sponsor or co-sponsor Congressional Science and Engineering Fellows:

Acoustical Society of America	American Society of Plant Physiologists
American Association for the Advancement of Science	American Veterinary Medical Association
American Geophysical Union	Biophysical Society
American Institute of Biological Sciences	Engineering Society of Detroit
American Institute of Physics	Federation of American Societies of Food Animal Sciences
American Physical Society	Geological Society of America
American Psychological Association	Institute of Electrical and Electronics Engineers
American Society for Horticulture Science	National Society of Professional Engineers
American Society for Microbiology	Office of Technology Assessment
American Society of Mechanical Engineers	

Applicants for these fellowships should apply directly to the appropriate professional society. Stipends, application procedures, timetables, and deadlines vary by society. For further information about the program, contact each society directly. A list of the societies, with mailing addresses and contact people, is available from:

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

Minorities and persons with disabilities are encouraged to apply.

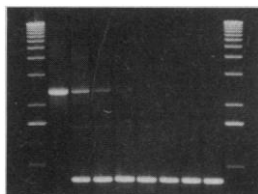


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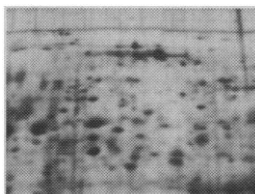
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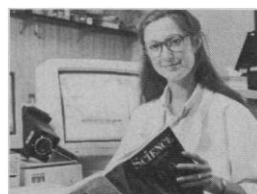
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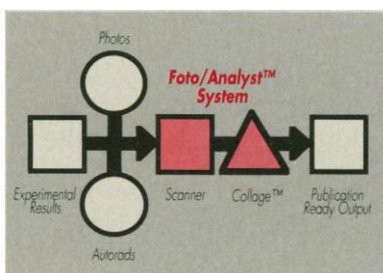


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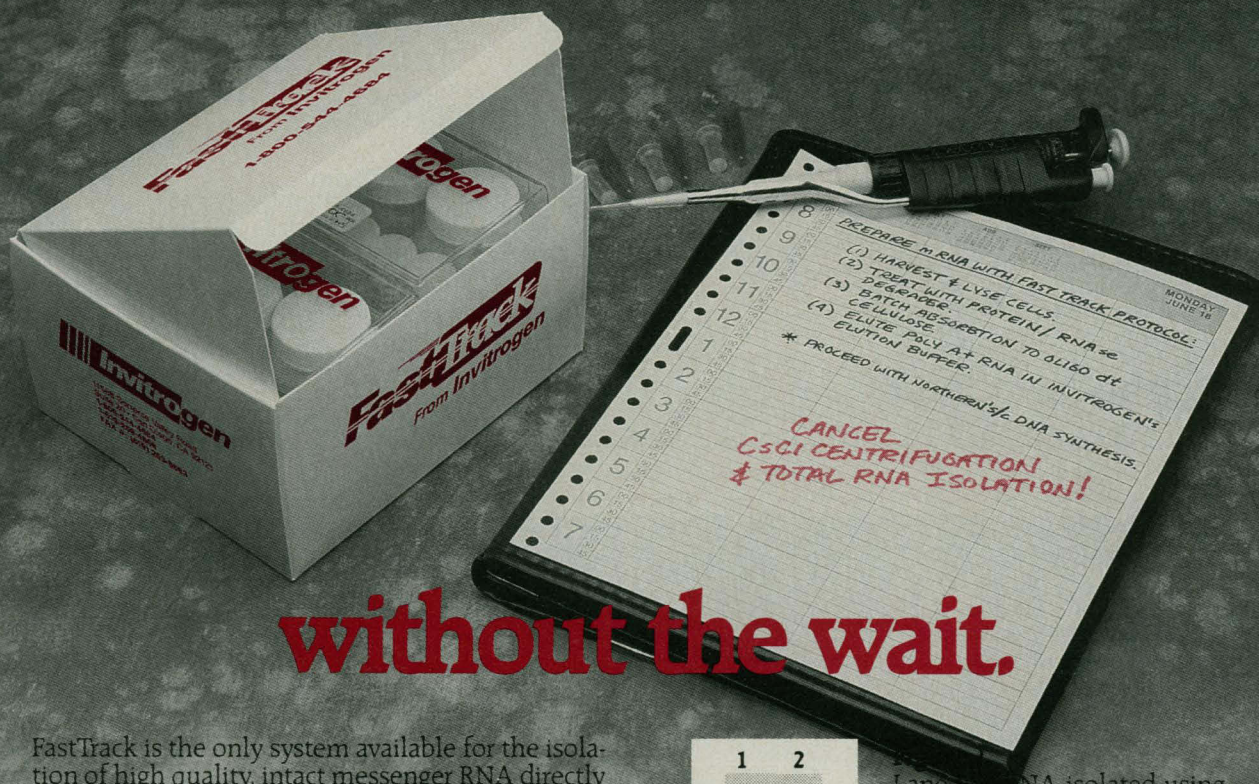
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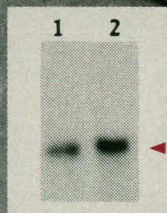
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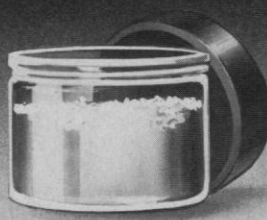
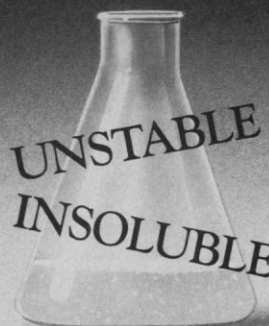
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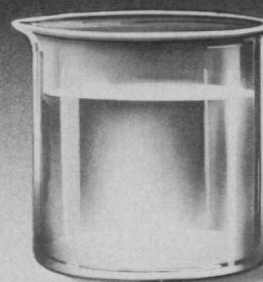
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PROBLEM?



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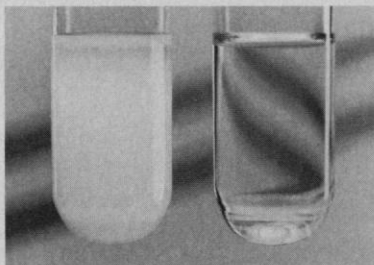
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Benchtop Monitoring of DNA Labeling

The Bioscan Quick-Count performs immediate quantitation of radioisotopes without scintillation fluid. This quick, benchtop method for monitoring ^{32}P incorporation into DNA avoids the delay and inconvenience associated with the use of shared scintillation counters. The unit is available for one-tenth the cost of most scintillation counters and occupies less than 1 square foot of bench space. The Quick-Count with Flow Analysis Module can count the output directly from chromatography columns with an efficiency of approximately 40%. It provides immediate information on separation quality and percentage of ^{32}P incorporation without pipetting or sample preparation. Bioscan. Circle 467.

Liquid Chromatographs

The HP 1090 Series II/L HP 1090 Series II/M liquid chromatographs extend Hewlett-Packard's line. The Series II/L is designed for analysts running a high volume of samples using established methods. In automated operation, periodic calibration of standards is available. All functions can be controlled from one simplified built-in keyboard. The Series II/M contains automated optimization software and a new quaternary solvent delivery system for greater speed and flexibility in developing and testing analytical methods. The sensitivity and selectivity of the models' diode array detector have also been enhanced. Hewlett-Packard. Circle 470.

Portable GC-MS Instruments

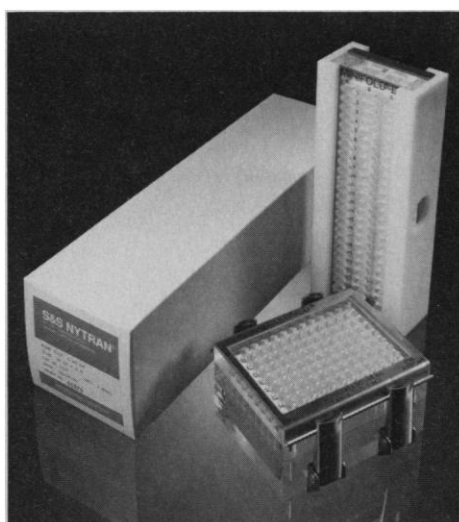
The SpectraTrak 600 is a portable gas chromatograph (GC)-mass spectrometer (MS). Shock-mounted in a weatherproof case, the unit is designed for transport to remote field sites by jeep, aircraft, or other vehicle, and can be set up in minutes. Ana-

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

lytical performance is comparable to that of benchtop systems. The SpectraTrak 700 is a similar model designed for automated real-time monitoring at stationary field or industrial locations. The model is installed in a weatherproof cabinet with an external computer control station and is available with multipoint sampling, networking, and remote-control capability. Viking Instruments. Circle 469.

Nylon Transfer Membranes

The Nytran nylon transfer membrane has a smooth transfer surface. Nytran gives sharp clear bands with a minimum of non-specific binding of probe material for im-



proved signal-to-noise ratio. It has a high binding capacity over a wide range of fragment sizes and high sensitivity to detect low concentrations of nucleic acid. Schleicher & Schuell. Circle 464.

Micromanipulators

The MX200 Series Micromanipulators enable quick and accurate placement of micropipettes, microprobes, and small tools. Submicrometer positioning capability makes them suited for critical applications such as patch-clamp recordings, microinjection, and manipulation of small cells. They feature all-stainless steel linear stages with thermally matched crossed-roller bearings for drift-free stability. Their design incorporates five axes of motion. The Model MX300 Series Huxley-style Micromanipulators incorporate advanced features, including five axes of coarse and three axes of fine movement. Submicrometer adjustment is made possible by ultrahigh-resolution manual drives. Newport BioInstruments. Circle 481.

Safe Lab Waste Disposal

The Pipet Tip Retainer can be used safely and conveniently to dispose of used pipette tips, laboratory gloves, sample tubes, and filters. The user simply flips up the top that covers the dispensing hole and drops the refuse into the box. Users never need touch items exposed to blood, chemicals, or other biological hazards. The entire top cover lifts off for each disposal of larger items such as plastic gloves or lab tissues. Isolab. Circle 472.

Fast Reusable Cartridges

RapidChanger reusable cartridges allow rapid (2 min) desalting and buffer exchange of protein or nucleic acid samples and removal of unincorporated isotope or free nucleotides from protein or DNA-labeling reactions. The syringe-loaded cartridges exhibit tight elution peaks and reproducible sample volumes, allowing the user to know when to begin and end sample collection. The cartridges are available in two sizes, for 50- to 200- μl samples or 250- μl to 1-ml samples. The autoclavable cartridges can be reused 20 times. Promega Corp. Circle 476.

Literature

Refrigerators/Freezers is a 16-page listing of a complete line of explosion-proof, flammable material storage, and chromatography refrigerators and freezers. The catalog provides complete descriptions on construction features, temperature ranges, volumes, electrical requirements, chamber and exterior dimensions, and weights. Lab-Line Instruments. Circle 520.

Plug-In Data Acquisition Boards—Overview, the first in a series of "Technical Tips" publications, discusses inputs, acquisition and conversion, analog outputs, control, peripheral functions, formulas, diagrams, and terms. Keithley MetraByte. Circle 494.

Specificity Reference Reagents for Human Immunoglobulins is a bulletin covering the technical data, characteristics, and applications of a complete line of specificity reference reagents for the isotyping of human immunoglobulins and specific antibodies in cells, tissues, and body fluids. Nordic Immunological Laboratories (USA). Circle 521.

Product Specification, Immunological Reagents to Mouse Immunoglobulins covers the purity, antibody specificity, cross-reactivity, and performance testing of these products. The preparations are specific to mouse immunoglobulin isotypes (classes, subclasses, lambda chains). Nordic Immunological Laboratories (USA). Circle 522.

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.

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.)

CREDIT CARDS: **SCIENCE** accepts MasterCard and VISA.

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.

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.

SITUATIONS WANTED ADS: As a service to AAAS members in good standing, **SCIENCE** offers free placement of Situations Wanted ads for individuals seeking full-time or part-time employment. A blind box may be used. Ads must be submitted in writing with text of 20 words or less, not including address or box number, and are limited to two insertions per member in each calendar year. Please enclose **SCIENCE** mailing label including AAAS membership number when submitting ad.

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

Address ad copy or requests for information to:

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Telephone: 202-326-6555
FAX: 202-682-0816

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

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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:

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Washington, DC 20005

POSITIONS OPEN

ASSISTANT PROFESSOR. A new tenure-track position will become available in August 1991 for a qualified individual who has demonstrated the ability to carry on an independent, vigorous and productive research program particularly in one of the following areas: control of gene expression, physical biochemistry, protein structure and function, membrane structure and function. Required qualifications are a Ph.D. degree in biochemistry or a closely related field, two or more years of postdoctoral training, and an established record of research productivity. Duties will include teaching graduate and/or introductory level biochemistry and molecular biology courses. The appointment is for 9 months at a salary commensurate with experience. Please submit curriculum vitae, synopsis of research plans (two to three pages), and three letters of recommendation. Applications will begin to be reviewed on 15 November 1990. Send material to: **Dr. Wesley D. Wicks, Department of Biochemistry, University of Tennessee (UTK), Knoxville, TN 37996-0840. UTK is an Affirmative Action/Equal Opportunity/Title IX/Section 504 Employer.**

UNIVERSITY OF UTAH DEPARTMENT OF BIOCHEMISTRY

Two tenure-track positions are available for autumn 1991 in the area of physical biochemistry. We are looking for strength and originality in the determination of the structures of macromolecules, elucidation of their mechanisms of action, and characterization of reaction energetics. Individuals expert in NMR, optical methods, thermodynamics, kinetics, or x-ray crystallography are particularly encouraged to apply. Applicants should hold a doctoral degree and have a strong record of original research. Preference will be given to applicants at the level of **ASSISTANT PROFESSOR**, but candidates at more senior ranks will also be considered. Successful candidates will join an interactive and diverse faculty and participate in vital campus-wide graduate programs. Send curriculum vitae, a statement of research background and interests, and three letters of recommendation to: **Dana Carroll, Faculty Search Committee, Department of Biochemistry, University of Utah School of Medicine, Salt Lake City, UT 84132. Deadline for applications is 1 December 1990; late applications will be considered if openings are still available. Equal Opportunity/Affirmative Action Employer.**

ASSISTANT PROFESSOR DEPARTMENT OF MICROBIOLOGY THE UNIVERSITY OF TENNESSEE KNOXVILLE, TENNESSEE

Qualifications: Doctoral degree and at least 2 years of postdoctoral experience in molecular virology or closely allied biological science, demonstrated research productivity in virology, and potential excellence in teaching.

Responsibilities: Graduate and undergraduate teaching in virology/molecular biology, establishment of a productive independent research program, and academic responsibilities normally associated with a tenure-track faculty position.

Starting date: 1 August 1991.

Applicants should submit a letter of interest accompanied by curriculum vitae, a description of the applicant's research program and career objectives, and the names, addresses, and telephone numbers of three individuals who can evaluate the applicant's qualifications for the position. *Applications from women and minorities are especially invited.* All material should be sent to: **Dr. Barry Rouse, Chairman, Search Committee, Department of Microbiology, University of Tennessee, Knoxville, TN 37996-0845.** Nominations should be made as soon as possible; evaluation of applications will begin in December 1990. *The University of Tennessee is an Equal Opportunity/Affirmative Action/Title IX/Section 504 Employer.*

MOLECULAR GENETICIST/MOLECULAR CELL BIOLOGIST. The University of California, San Francisco, School of Medicine, Department of Ophthalmology and Program in Biological Sciences, is seeking a scientist who has a strong commitment to developing a research program relevant to degenerative diseases of the retina. We prefer candidates at **ASSISTANT PROFESSOR** level, but will consider appointment at a more senior level. Send curriculum vitae, summary of research accomplishments and future plans, and names of at least three references by 12 October 1990 to: **David R. Copenhagen, Ph.D. Ophthalmology-Beckman Vision Center, University of California, San Francisco, CA 94143-0730. Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

POSITIONS OPEN

ASSISTANT PROFESSOR GENETICS/EVOLUTIONARY BIOLOGY

Position in the Department of Biology to begin August 1991 to teach genetics, evolution, and introductory biology. Ph.D. required. Commitment to undergraduate teaching and research in a liberal arts context required. Submit application letter, résumé, statement of teaching and research goals, all transcripts, and three letters of recommendation to: **Dr. Gerald L. Van Amburg, Department of Biology, Concordia College, Moorhead, MN 56562.** File review begins 15 October 1990 and continues until position is filled. *An Equal Opportunity Employer.*

ASSISTANT PROFESSOR, TOXICOLOGY

ECOTOXICOLOGIST: tenure-track assistant professorship to investigate xenobiotic toxicity, the specific area of research to complement interests of existing faculty. Ph.D. in ecotoxicology or a related field; postdoctoral experience preferred. The applicant will be expected to develop an externally funded research program and participate in graduate student education. The department currently operates a freshwater biological research station. Submit curriculum vitae including a complete list of graduate courses or transcripts, a statement of research interests, and three letters of recommendation by 15 November 1990 to: **Dr. Douglas Wart-zok, Department of Biological Sciences, Indiana University-Purdue University, Fort Wayne, IN 46805-1499. An Affirmative Action/Equal Opportunity Employer.**

ASSISTANT PROFESSOR DEPARTMENT OF BIOCHEMISTRY UNIVERSITY OF NEBRASKA-LINCOLN

Seek candidates for 12-month, tenure-leading, 85% research and 15% teaching, assistant professor position. Research interests and expertise must be in mammalian biochemistry. Requires Ph.D. in biochemistry or closely related field, postdoctoral experience, and demonstrated potential to establish an independent research program. Send curriculum vitae, an outline of future research plans, copies of up to three representative publications, and three letters of recommendation postmarked by 19 November 1990 to: **Dr. John Markwell, Department of Biochemistry, University of Nebraska-Lincoln, Lincoln, NE 68583-0718. Telephone: 402-472-2924 or -2932. FAX: 402-472-7842. Affirmative Action/Equal Opportunity Employer.**

ASSISTANT PROFESSOR, BIOCHEMISTRY

The Department of Chemistry at Western Michigan University (WMU) invites applications for a tenure-track assistant professor beginning 19 August 1991 pending budgetary approval. Qualifications for the position include a Ph.D. and postdoctoral experience. The successful applicant will be expected to develop an active, independent, funded research program that includes undergraduate and graduate students as well as contribute to the teaching programs of the department. Research interests in all areas of biochemistry will be considered. Send curriculum vitae, names of three references, and a brief description of research plans by 26 October 1990 to: **Dr. Michael E. McCarville, Department of Chemistry, Western Michigan University, Kalamazoo, MI 49008. WMU has a demonstrated commitment to Equal Employment Opportunity and the goals of Affirmative Action.**

ASSISTANT PROFESSOR PLANT MOLECULAR BIOLOGY DUKE UNIVERSITY

The Department of Botany at Duke University invites applicants with demonstrated research productivity for a tenure-track assistant professorship in plant molecular biology. The successful candidate will be expected to develop a vigorous research program, contribute to the training of graduate students, and teach molecular biology to undergraduates. He or she would also participate in interdepartmental graduate programs in cell/molecular biology and genetics. Send curriculum vitae, a summary of past experience, future research plans, representative reprints, and three letters of evaluation by 1 November 1990 to: **Dr. James N. Siedow, Chair for the Search, Department of Botany, Duke University, Durham, NC 27706. Duke University is an Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

TWO ASSISTANT PROFESSORS. Tenure-track positions starting September 1991. Candidates with Ph.D. and a strong commitment to undergraduate teaching and research are encouraged to apply.

MOLECULAR BIOLOGIST/MICROBIOLOGIST

Teaching responsibilities include lecture/laboratory courses in microbiology and the development of an upper division recombinant DNA laboratory course. Occasional participation in the introductory biology course is expected.

HISTOLOGIST/PARASITOLOGIST

Will be responsible for coordinating and teaching in the general biology course for majors. Other duties include teaching upper division courses in histology and parasitology.

Send letter of application, curriculum vitae, a statement of teaching and research goals, selected reprints, and three letters of reference by 30 November 1990 to: Search Committee Chairman, Biology Department, Fairfield University, Fairfield, CT 06430. *Women and minorities are encouraged to apply. Fairfield University is an Affirmative Action/Equal Opportunity Employer.*

FOREST ENTOMOLOGIST CHEMICAL ECOLOGIST

The faculty of environmental and forest biology has a tenure-track, academic-year vacancy at the **ASSISTANT OR ASSOCIATE PROFESSOR** level. Ph.D. required; postdoctoral experience preferred. We expect a vigorous, funded research program to be developed in forest entomology, with emphasis on chemical ecology, that significantly contributes to our doctoral program. Systematics and evolution, plant or microbe interactions, behavioral ecology, and pest management are preferred areas. Teaching duties include chemical ecology, one or more courses in a specialty area, and compensated participation in a summer field program. By 7 November 1990, send curriculum vitae, statement of career goals, and three letters of reference to: Dr. Roy A. Norton, State University of New York (SUNY) College of Environmental Science and Forestry (ESF), Syracuse, NY 13210. Position available 1 January 1991. *SUNY-ESF is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

EVOLUTIONARY ECOLOGIST

The Department of Biology at Washington University is seeking an evolutionary ecologist for a tenure-track faculty position at the rank of **ASSISTANT PROFESSOR**. Areas of interest include, but are not limited to, ecological genetics, population and community ecology, coevolution, and behavioral ecology. The evolutionary ecologist would be expected to interact with a faculty strong in population genetics, macroevolution, systematics, and ecological genetics using molecular tools. Postdoctoral experience is preferred.

Applicants should send curriculum vitae, statement of research and teaching interests, and three letters of recommendation by 1 December 1990 to:

Dr. Alan R. Templeton, Chair
Evolutionary Ecologist Search Committee
Department of Biology
Washington University
St. Louis, MO 63130

Washington University is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR OF PHARMACOLOGY

The Department of Pharmacology of the University of Illinois College of Medicine seeks applications from highly qualified scientists capable of establishing independent research programs and collaborative ties with ongoing research. The appointment will be for a tenure-track assistant professor. Minimal qualifications include a Ph.D. and/or M.D. degree with a strong track record in research. Ongoing research programs are focused on cardiovascular, biochemical, and neuropharmacology problems with a cellular and molecular emphasis. Duties will include instruction to medical, dental, and graduate students. Send curriculum vitae and the names of four evaluators to: Pharmacology Search Committee, Department of Pharmacology, University of Illinois College of Medicine, 835 South Wolcott, Chicago, IL 60612. For full consideration, apply by 9 November 1990. *The University of Illinois is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities.*

POSITIONS OPEN

ASSISTANT PROFESSOR MOLECULAR GENETICS UNIVERSITY OF ILLINOIS AT CHICAGO

The Laboratory for Molecular Biology of the Department of Biological Sciences invites applications for a tenure-track faculty position at the level of assistant professor available fall of 1991. The laboratory is interested in further expanding its strong molecular genetics research group. Outstanding candidates with promising research programs utilizing molecular and/or genetic approaches to modern cellular or developmental problems will be considered. Successful candidates are expected to have a Ph.D. or M.D. degree with postdoctoral experience, and to provide evidence that they can pursue a vigorous, independent research program, and contribute to the department's teaching program. Please apply before 15 November 1990 by sending curriculum vitae, description of research interests, and names and addresses of three references to:

Molecular Genetics Search Committee
c/o Dr. Sidney B. Simpson, Jr., Head
Department of Biological Sciences (M/C 066)
University of Illinois at Chicago (UIC)
P.O. Box 4348, Chicago, IL 60680

UIC is an Affirmative Action/Equal Opportunity Employer.

MOLECULAR AND CELLULAR IMMUNOLOGISTS

The Department of Microbiology of the College of Physicians and Surgeons of Columbia University seek highly qualified applicants to fill a tenure-track **ASSISTANT PROFESSOR** position in a newly constructed center for molecular immunology. The general focus of this center will be on the elucidation of molecular and cellular mechanisms that influence the generation of antibody and T cell receptor repertoires. We invite applications from molecular or cellular immunologists who are qualified to establish strong, independent research programs in this field. Demonstrated expertise and interest in the molecular aspects of lymphocyte differentiation, the molecular basis of T/B cell interactions, or the molecular basis for lymphocyte-specific signal transduction mechanisms are required.

The new position will include a generous amount of newly constructed laboratory and office space and access to a variety of state-of-the-art core facilities including transgenic mouse and sophisticated cell-sorting equipment. Interested applicants should send curriculum vitae and three letters of recommendation and a description of their research interests to: Dr. Saul J. Silverstein, Department of Microbiology, College of Physicians and Surgeons of Columbia University, 701 West 168th Street, New York, NY 10032.

Columbia University is an Equal Opportunity/Affirmative Action Employer.

PHARMACOLOGISTS UNIVERSITY OF TORONTO

The Department of Pharmacology, Faculty of Medicine, University of Toronto, invites applications for three tenure-track **ASSISTANT PROFESSORSHIPS** from individuals well qualified to establish an independent first-class research program in one of the following areas:

- Molecular biology of receptors/signal transduction/2nd messengers.
- Cellular/molecular toxicology.
- Molecular biology/genetics of drug metabolism.

Highly qualified individuals working in other areas of pharmacology also are invited to apply. Successful applicants will have promise in teaching as well as in research and will be expected to teach some portion of pharmacology to students in undergraduate, graduate, or professional (medical/dental) courses and to train graduate students. Qualifications should include a Ph.D. or M.D. degree with postdoctoral research experience. The starting date is July 1991 with some flexibility if necessary. Applications should include complete curriculum vitae, a letter stating current and intended research interests, and the names of at least three referees. Please indicate which of the three specific positions you are seeking. Apply before 15 December 1990 to: Dr. Allan B. Okey, Professor and Chair, Department of Pharmacology, Medical Sciences Building, University of Toronto, Toronto, Ontario, Canada M5S 1A8.

The University of Toronto encourages both men and women to apply. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada.

POSITIONS OPEN

Dalhousie University Faculty of Medicine. Nova Scotia Medical Research Fund Basic Science Scholarship. The Faculty of Medicine announces a competition for one tenure-track appointment at the level of **ASSISTANT PROFESSOR** to be made initially for 3 years through a Nova Scotia Medical Research Fund (NS-MRF) Scholarship. This award will be made in one of the basic science (preclinical) departments, including community health and epidemiology; however, a cross appointment in a clinical department will also be expected. The successful applicant must have a Ph.D., M.D., D.V.M., or equivalent with recent postdoctoral experience, and is expected to develop an independent interdisciplinary research program with external funding, ideally in one of the major research areas (cancer cell biology, cardiovascular, immunology and infectious diseases, neuroscience) within the faculty. Applications consisting of curriculum vitae, a summary of research interests, and three letters of reference should be sent to: Dr. D. Howard Dickson, Associate Dean Research, Faculty of Medicine, 15th Floor, Tupper Medical Building, Dalhousie University, Halifax, Nova Scotia B3H 4H7, Canada.

Closing date for receipt of applications is 4 January 1991. This appointment will be made on or after 1 April 1991. *This position will be filled in accordance with the Dalhousie University Affirmative Action Policy. In compliance with Canadian immigration regulations, this advertisement is directed at this time only to Canadian citizens and landed immigrants.*

CHEMICAL/ENVIRONMENTAL SIGNAL TRANSDUCTION ASSISTANT PROFESSOR.

The Department of Biological Sciences invites applications for a tenure-track position in cellular mechanisms of environmental signal transduction. Applicants in all areas of environmental signal transduction are encouraged, but the department has particular interests in molecular and/or electrophysiological responses to external signals in marine organisms. The successful candidate will be expected to establish an active, externally funded research program and to participate in graduate and undergraduate instruction. Ph.D. and postdoctoral experience are required. Generous start-up funds and competitive salaries are offered. Applications, including curriculum vitae, a statement of research interests, reprints of three selected publications, and letters from three references, should be sent by 15 November 1990 to: Signal Transduction Search, Department of Biological Sciences, University of South Carolina, Columbia, SC 29208. *Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR EUKARYOTIC CELL/MOLECULAR BIOLOGY

Tenure-track appointment beginning 20 August 1991 in a new and expanding Department of Microbiology. Ph.D. and postdoctoral experience are required and preference will be given to applicants with training in the fields of immunology and/or animal virology. Applicant should be capable of conducting an independent research program in mammalian molecular biology or cell biology, directing graduate student research, and contributing to an interdisciplinary graduate program in molecular and cell biology. Applicants should have sufficient familiarity with flow cytometry to aid in the establishment of a flow cytometry laboratory and supervise a research associate who will be responsible for day-to-day operation of this facility. Respond to: Dr. Carl A. Schnaitman, Chair, Department of Microbiology, Arizona State University, Tempe, AZ 85287-2701, including curriculum vitae, names and addresses of three references, a statement of research interests, and relevant reprints. Applications will be reviewed on 15 December 1990 and the 15th of each succeeding month until filled.

Arizona State University is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT/ASSOCIATE PROFESSOR, ICH- THYOLOGY OR FISHERIES SCIENCE.

The Oceanographic Center of Nova University has an immediate position for a Ph.D. fisheries scientist or marine ichthyologist, specializing in biochemistry, physiology, or physiological ecology. Duties include a mix of undergraduate and graduate teaching, and externally funded research. Send letter of intent, curriculum vitae, availability date and three letters of reference concerning teaching and research experience to: Human Resource, Nova University, 3301 College Avenue, Fort Lauderdale, FL 33314 by 2 November 1990.

FACULTY POSITIONS IN MOLECULAR BIOLOGY SOUTHERN ILLINOIS UNIVERSITY AT CARBONDALE

Applications are invited for tenure track openings at the Assistant Professor level in the area of Molecular Biology/Genetics. These new 12 month appointments are part of the University's commitment to strengthen and expand its program in molecular biology in the College of Agriculture, College of Science, and School of Medicine. The initial openings are in the departments listed below. In addition to establishing a strong research program, teaching at the undergraduate and graduate levels is expected. All candidates must have an earned doctorate and postdoctoral research experience. Salary, research facilities and start-up funds are very competitive. Applications will be accepted by the Departments as shown below until at least Oct. 22, 1990 or until the positions are filled. Separate applications should be forwarded to each Department.

Chemistry and Biochemistry. A position is available in the general area of molecular biology. All qualified candidates will be considered but preference will be given to persons working on problems associated with regulation of gene expression in eucaryotes. Applicants should send their curriculum vitae, a statement of research plans and have at least three letters of reference sent to Dr. R. Gupta; Department of Chemistry and Biochemistry; Southern Illinois University at Carbondale; Carbondale, IL 62901.

Microbiology. A position is available for a molecular geneticist. All qualified applicants will be considered but preference will be given to those whose primary area of research interest is in some aspect of the molecular genetics of the immune system, or the molecular genetics of industrially or environmentally important microorganisms. Interested applicants should send their curriculum vitae, a statement of research plans, and have at least three references sent to Jack Parker, Chair, Department of Microbiology, Southern Illinois University at Carbondale, Carbondale, IL 62901.

Plant and Soil Science. A position is available in the general area of molecular/cell agronomy. All qualified candidates will be considered but preference will be given to individuals whose primary interest is in using techniques of molecular biology for the improvement of agronomic crops. To apply, send a letter of application, curriculum vitae, a statement of research plans, all college transcripts, and have at least three letters of reference sent to: Dr. Donald Stucky, Chairman; Department of Plant and Soil Science; Southern Illinois University at Carbondale; Carbondale, IL 62901. Southern Illinois University at Carbondale is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITIONS

PROTEIN STRUCTURE AND PROTEIN ENGINEERING

The Waksman Institute and the Department of Chemistry at Rutgers, The State University of New Jersey, are recruiting outstanding individuals to join a multidisciplinary and rapidly expanding group of investigators in the area of Macromolecular Structure, Structure-Function Relationships, and Protein Engineering. Two tenure-track faculty positions are available:

MACROMOLECULAR X-RAY CRYSTALLOGRAPHY

PROTEIN ENGINEERING: CATALYTIC ANTIBODIES, ANTIBODY ENGINEERING, DE NOVO PROTEIN DESIGN

We seek individuals with demonstrated ability and commitment to conduct vigorous research programs and to teach. The new faculty members will enjoy many opportunities to interact with other x-ray crystallographers, molecular biophysicists, and biochemists on the Rutgers campus. State-of-the-art x-ray diffraction and computational facilities have been established for these disciplines. Salary and rank will be commensurate with experience, background, and professional qualifications.

Applications should include an expression of interest in the position, a current publication list, a curriculum vitae, and confidential letters of recommendation from four professional references. Applications will be accepted until the positions are filled.

Applications and nominations may be directed to:

Professor Helen M. Berman
Chairperson, Macromolecular Structure and
Protein Engineering Search Committee
Department of Chemistry
Rutgers, The State University of New Jersey
New Brunswick, NJ 08903

THE STATE UNIVERSITY OF NEW JERSEY

RUTGERS

An Affirmative Action / Equal Opportunity Employer

Public Health Service • National Institutes of Health
National Cancer Institute

A Senior Executive Service Vacancy

Associate Director Developmental Therapeutics Program Division of Cancer Treatment Location: Rockville, Maryland

The Associate Director, Developmental Therapeutics Program (DTP), will be responsible for the planning, direction and implementation of a broad national and international program of drug discovery and development designed specifically to maintain a continuous flow of therapeutic agents and materials from laboratory clinics for the treatment of cancer and AIDS. The DTP is composed of three distinct segments with an annual funding level of approximately \$117 million. The segments consist of a large extramural contract-based drug-development program (approximately \$50 million), a grant-supported Biochemistry and Pharmacology program (approximately \$60 million), and an intramural, laboratory oriented research program (approximately \$7.5 million) exclusive of salaries and related fringe benefits. The DTP staff consists of approximately 275 scientific and supporting personnel.

This is a Civil Service position in the Senior Executive Service (SES) with an annual salary compensation between ES-1 through ES-4 (currently \$71,200 to \$79,200). In addition, physicians may be eligible for a Physician's Comparability Allowance up to \$20,000 per year. (Applicants alternatively may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service.) The individual selected, if not presently in SES, must serve a one-year probationary period.

Applicants must meet the minimum educational requirements for at least one of the following: Medical Officer, GS-602; Chemist, GS-1320; Microbiologist, GS-403; Pharmacologist, GS-405; Biologist GS-401; or Health Science Administrator, GS-601; as defined by the U.S. Office of Personnel Management Handbook X-118 (Qualification Standards for Positions under the General Schedule), which is available in Federal Personnel Offices. Applicants must also meet established mandatory professional/technical and managerial/executive requirements. Applicants will be further evaluated on the degree to which they possess additional desirable qualifications in the areas of professional/technical qualifications, managerial/executive qualifications, scientific reputation/peer recognition, training and education, and honors and awards. A copy of the requirements may be obtained by contacting Ms. Sue Hickman in the Personnel Management Branch, NCI, at (301) 496-8182.

Applications for Federal Employment (SF-171) are to be sent to the above individual at:

**The National Cancer Institute,
Personnel Management Branch
9000 Rockville Pike
Building 31, Room 3A16,
Bethesda, Maryland 20892.**



A current curriculum vitae and bibliography must accompany all applications for entrance into the SES. Resumes are not acceptable applications for entrance into the SES. Public Health Service Commissioned Officers wishing to enter the SES must follow the above procedures. Officers interested in performing the duties of the position within the Commissioned Corps may submit a resume to the above address.

Applications must be received by October 26, 1990.

Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, religion, sex, national origin, politics, marital status, physical or mental handicap, age, or membership or non-membership in an employee organization.

POSITIONS OPEN

ASSISTANT PROFESSOR DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY

Applications are invited for a tenure-track position at the assistant professor level. Applicants should have two or more years of postdoctoral experience and should have the potential for establishing an independent research program in biochemistry and molecular biology. Interest and excellence in teaching and research are expected. The medical center includes the schools of dentistry, medicine, nursing, and graduate studies. The department has biotechnology and tissue culture support units. The present department consists of 14 faculty with \$1.7 million in annual research grant support. Interested individuals should send curriculum vitae with bibliography, short (three-page) summary of planned research, and the names and addresses of three references to the following: **Robert Roskoski, Jr., Head, Department of Biochemistry and Molecular Biology, Louisiana State University Medical Center (LSUMC), 1100 Florida Avenue, New Orleans, LA 70119-2799. LSUMC is an Affirmative Action/Equal Opportunity Employer.**

MOLECULAR BIOLOGIST, ASSISTANT PROFESSOR. The Department of Biology, State University of New York (SUNY) College at Fredonia, invites applications for a tenure-track position available January 1991. Qualifications include a Ph.D. in biological sciences and a commitment to undergraduate instruction and research. Experience in recombinant DNA technology is required. Primary teaching responsibilities will include laboratory courses in recombinant gene technology and biochemistry. The college has a student population of about 4500 undergraduates and is located near Lake Erie, 40 miles from Buffalo. The department has 10 faculty and about 250 undergraduate majors in biology, medical technology, and recombinant gene technology. M.S. degrees are offered in biology and biology education. Applications should include curriculum vitae, three letters of recommendation, and a letter explaining teaching and research interests. Send applications to: **Molecular Biologist Search Committee, Department of Biology, SUNY College at Fredonia, Fredonia, NY 14063.** Application deadline is 26 October 1990. *SUNY College at Fredonia is an Equal Opportunity/Affirmative Action Employer. Women and minorities are strongly encouraged to apply.*

University of Illinois at Chicago. Joint faculty position, **ASSISTANT OR ASSOCIATE PROFESSOR** level, in women's studies and an academic department effective fall 1991 (subject to funding). Preference: candidates in the social or natural sciences with a strong record in teaching and research, familiarity with the field of women's studies, and ability and desire to work in a multicultural and multiracial environment. Salary is competitive. Founded in 1973, the Women's Studies Program offers an undergraduate minor, an interdisciplinary major, and a graduate concentration. Approval of a university-wide Research Center on Women and Gender is in process. Application deadline: 1 November 1990. Send nominations or applications (including curriculum vitae and names, addresses, and telephone numbers of four references) to: **Margaret Strobel, Chair of Search, Women's Studies Program (M/C 360), University of Illinois at Chicago, Box 4348, Chicago, IL 60680. Telephone: 312-413-2300. The University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer.**

ASSISTANT/ASSOCIATE PROFESSOR. The Department of Microbiology and Immunology of the Texas College of Osteopathic Medicine (TCOM) is seeking applicants for a tenure-track faculty position at the assistant or associate professor rank. TCOM is a state-supported medical school housed in new, well-equipped facilities and affiliated with the University of North Texas. Requirements include postdoctorate training and a strong potential for the development of a successful independent research program. Teaching duties include instruction of medical and graduate students. Priority subdisciplines include molecular microbiology, molecular immunology, and molecular biochemistry. A medical background is preferred. *TCOM is an Equal Opportunity/Affirmative Action Employer.*

Send curriculum vitae, summary of research interests and goals, and names and addresses of three references to: **Dr. Paula Sundstrom, Search Committee Chairman, Department of Microbiology and Immunology, Texas College of Osteopathic Medicine, 3500 Camp Bowie Boulevard, Fort Worth, TX 76107-2690.**

POSITIONS OPEN

ASSISTANT PROFESSOR IN COGNITIVE OR BEHAVIORAL NEUROSCIENCE. The Psychology Department at the University of South Florida seeks a new or recent Ph.D. with an area of concentration in either cognitive neuroscience or behavioral neuroscience. Contingent on final approval of funding, this tenure-earning position will begin in August 1991. The successful candidate will be someone with exceptional research skills and the potential to attract external support for their research. A commitment to excellence in teaching at both undergraduate and graduate levels is expected. Salary is negotiable and competitive, and the teaching load is supportive of a productive research program. *Applications from women and members of ethnic minorities are particularly encouraged.* Deadline for application is 1 January 1991. Interested candidates should indicate whether their area is cognitive or behavioral neuroscience and should send curriculum vitae, a statement of research interests, representative scholarly work, and three letters of recommendation to: **Chair, Experimental Search Committee, Department of Psychology, University of South Florida, Tampa, FL 33620-8200. The University of South Florida is an Affirmative Action/Equal Opportunity Employer.**

ANIMAL SCIENCE, ASSISTANT OR ASSOCIATE PROFESSOR. Animal nutrition. Animal and Range Sciences, New Mexico State University, Las Cruces, New Mexico; 70% research and 30% teaching. Digestive function and metabolism of ruminants. Tenure-track, 12-month position. Ph.D. degree in animal science with strength in animal nutrition required. Reply to: **Joe D. Wallace, Animal and Range Sciences, Department 3-I, Box 30003, Las Cruces, NM 88003-0003** by 15 November 1990. Include résumé, transcripts, list of publications, and four references. *Equal Opportunity/Affirmative Action Employer.*

MOLECULAR BIOLOGIST. Indiana University School of Medicine is seeking applicants for a tenure-track position in the Hematology/Oncology Division, Department of Medicine, at the **ASSISTANT OR ASSOCIATE PROFESSOR** level. Applicants should have experience in the molecular biology or molecular endocrinology of solid tumors, and a commitment to excellence in research. Send curriculum vitae to: **Ronald Hoffman, M.D., Chief, Hematology/Oncology Division, Department of Medicine, Indiana University School of Medicine, IB442, 975 West Walnut Street, Indianapolis, IN 46202-5121. Affirmative Action/Equal Opportunity Employer.**

PLANT MOLECULAR BIOLOGY

The University of Idaho, Department of Bacteriology and Biochemistry, is seeking applicants for a tenure-track **ASSISTANT/ASSOCIATE PROFESSORSHIP** in biochemistry. The successful candidate will have a proven research record in higher plant molecular biology. Responsibilities for the research and teaching position include obtaining competitive extramural funding and teaching at the graduate and undergraduate levels. A Ph.D. in molecular biology, biochemistry, or a closely related field and postdoctoral experience are required. To apply, send a detailed letter of interest which includes teaching and research goals, curriculum vitae, and names of four references before 1 December 1990 to: **Dr. Daniel J. Guerra, Chair, Search Committee, Department of Bacteriology and Biochemistry, University of Idaho, Moscow, ID 83843. The University of Idaho is an Equal Opportunity/Affirmative Action Employer and Educational Institution.**

CANCER PHARMACOLOGY AND THERAPEUTICS. Applications are invited for a tenure-track position at the **ASSISTANT OR ASSOCIATE PROFESSOR** level in the Lucille Markey Cancer Center with a primary academic appointment in the College of Pharmacy at the University of Kentucky. The successful candidate will establish an independent research program in cancer pharmacology and participate in teaching in graduate and professional programs. Substantial opportunities exist for multidisciplinary research. Interested candidates should submit curriculum vitae, a statement of research objectives, and the names of three references to: **Dr. Patrick J. McNamara, Chairman, Cancer Search Committee, College of Pharmacy, University of Kentucky, Lexington, KY 40536-0082.** Candidate review will begin on 15 November 1990 and will continue until the search is satisfactorily concluded. *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR, ENVIRONMENTAL TOXICOLOGY. Applications are invited for a tenure-track position in the Department of Environmental Health Sciences at the University of South Carolina. The applicant should have a doctoral degree and research strength in areas of environmental toxicology. We seek applicants that would complement an interdisciplinary graduate program in environmental quality, hazardous materials management, industrial hygiene, and vector control. Teaching experience, an interest in collaborative research, and a demonstrated record of research productivity are desirable. Submit curriculum vitae, a statement of teaching and research interests, and the names and addresses of three references no later than 1 November 1990 to: **Dr. H. N. McKellar, Chairman of Search Committee, Department of Environmental Health Sciences, University of South Carolina, Columbia, SC 29208. The University of South Carolina is an Affirmative Action/Equal Opportunity Employer.**

MOLECULAR BIOLOGY THE WICHITA STATE UNIVERSITY (WSU)

The Department of Biological Sciences is actively recruiting gifted individuals with demonstrated research and teaching skills in molecular biology for two tenure eligible positions at the **ASSISTANT/ASSOCIATE PROFESSOR** level. A research emphasis in genetics and/or developmental biology is preferable. Both positions require significant postdoctoral training, a record of productive research, the ability to interact collegially, and demonstrated capacity to direct a core laboratory in molecular biology. Appointment at the associate level requires a demonstrated record of funded research activity. Competitive salary with start-up funds available. Deadline for applications is 1 November 1990 or the first of the month until positions are filled. Submit curriculum vitae, summary of current and future research, and names of three references to: **Dr. K. Brown, Chair of Search Committee, Department of Biological Sciences, Campus Box 26, The Wichita State University, Wichita, KS 67208-1595. WSU is an Affirmative Action/Equal Opportunity Employer.**

DEVELOPMENTAL GENETICIST

The Program in Genetics and Cell Biology is seeking applications for a tenure-track faculty appointment in developmental genetics. Applicants must have an earned Ph.D. in an appropriate field and should have relevant postdoctoral experience. The position may be filled at either the **ASSISTANT OR ASSOCIATE PROFESSOR** level, depending upon qualifications. The successful candidate will be expected to establish an outstanding research program in eukaryotic developmental genetics using modern approaches of molecular and cell biology. Teaching obligations will include a graduate course in the area of specialty and participation in appropriate undergraduate courses. Applicants should send curriculum vitae, statement of research interests, copies of selected reprints, and have three letters of reference sent to: **Dr. Gary Thorgaard, Chair, Development Geneticist Search, Program in Genetics and Cell Biology, Washington State University, Pullman, WA 99164-4234** before screening of applications begins on 17 December 1990. *Washington State University is an Equal Opportunity/Affirmative Action Educator and Employer. Protected group members are encouraged to apply.*

TENURE-TRACK ASSISTANT/ASSOCIATE PROFESSOR WILDLIFE MANAGEMENT/ORNITHOLOGY

Must have doctoral degree requirements completed by 1 September 1991. Required: strong commitment to teaching; graduate training in wildlife management and avian ecology. A broad biology background, experience in college teaching and in wildlife management, environmental impact assessment preferred. Duties: teaching wildlife management, ornithology, ecology, conservation, and general biology; participating in program development, student advising; and supervising master's level graduate research; may include activity in minority student programs. Submit résumé, all official transcripts, and names of three references to: **Gordon Leidahl, Chairman, Department of Biological Sciences, California State University, Sacramento (CSUS), 6000 J Street, Sacramento, CA 95819.**

Closing date: review of applications will begin 1 November 1990; position will remain open until filled. Salary range: \$33,192 to \$41,844. *CSUS is an Affirmative Action/Equal Opportunity Employer.*

**PROVOST AND VICE PRESIDENT FOR
ACADEMIC AFFAIRS
WESTERN WASHINGTON UNIVERSITY**

President Kenneth P. Mortimer and the faculty of Western Washington University invite nominations and applications for the position of Provost and Academic Vice President.

The Provost is the University's chief academic officer. The person selected will have a distinguished record as a faculty member and as an academic administrator and will be fully qualified for appointment as a tenured full professor. He or she will have a demonstrated commitment to an extensive faculty and student role in university governance, a dedication to the preservation and improvement of quality educational programs, and a sensitivity and commitment to improving the environment for women and minority members of the community.

Western Washington University is a comprehensive university of 9400 students whose goal is to provide the highest quality undergraduate programs in the state, along with a number of selected, strong graduate programs. The University includes six colleges, a Graduate School, and a number of teaching and research centers and institutes.

The position of Provost and Academic Vice President is to be filled by summer of 1991. The salary and benefits are competitive. Names of nominees and candidates will be held in strictest confidence. Applications should include a letter of interest, a curriculum vitae, and the names and addresses of five references. Review of applications will begin about November 2, 1990 and will continue until a candidate is chosen. Nominations or applications should be addressed to:

Professor Stephen Sulkin, Chair
Provost/Academic Vice President
Selection Committee
Old Main 450
Western Washington University
Bellingham, Washington 98225.

Western Washington University is strongly committed to the principle of diversity. Therefore, we are interested in receiving applications from a broad spectrum of candidates, including women, members of ethnic and racial minorities, and disabled individuals.

ADVERTISEMENT

**Endowed Chair in Developmental Biology
Department of Genetics and Cell Biology
University of Minnesota, St. Paul, MN**

The University of Minnesota, Twin Cities Campus, invites applications and nominations of distinguished scientists for the newly endowed Ordway Chair in Developmental Biology at the rank of tenured FULL PROFESSOR. Qualifications include: an outstanding record of academic achievement, a strong record of extramural support, and a vigorous research program utilizing cell biology, molecular biology, and genetics applied to problems in eukaryotic development. Substantial startup funds will be provided. The Department of Genetics and Cell Biology, a department in the College of Biological Sciences, has responsibility for both undergraduate and graduate studies in Cell and Developmental Biology and Genetics. The successful candidate will be expected to teach and to direct a vigorous research program.

Applications should include curriculum vitae, a statement of research interests, and names of at least three references and be sent to: Ordway Chair Search Committee, Department of Genetics and Cell Biology, University of Minnesota, 250 Biological Sciences Center, St. Paul, MN 55108-1095. Applications will be accepted until November 30, 1990.

The University of Minnesota is an equal opportunity educator and employer and specifically invites and encourages applications from women and minorities.

UNIVERSITY OF OXFORD



in association with Trinity College

**UNIVERSITY LECTURESHIP
In Atmospheric, Oceanic and
Planetary Physics**

Applications are invited for a University Lectureship in Atmospheric, Oceanic and Planetary Physics. The successful candidate will have research interests in experimental atmospheric physics or a related field and may be offered a Tutorial Fellowship at Trinity College.

in association with Linacre College

**UNIVERSITY LECTURESHIP
In Atmospheric, Oceanic and
Planetary Physics**

Applications are invited for a University Lectureship in Atmospheric, Oceanic and Planetary Physics. The successful candidate will have research interests in geophysical fluid dynamics or a related field of physics and may be offered a Fellowship at Linacre College.

Further particulars of the above Lectureships and of the associated College Fellowships may be obtained by writing, specifying the post of interest, to Professor F.W. Taylor, Department of Atmospheric, Oceanic and Planetary Physics, Clarendon Laboratory, Oxford OX1 3PU, England, to whom a curriculum vitae and the names of three referees should be submitted by 31 October 1990.

The University is an Equal Opportunity Employer

DEPUTY HEAD OF MEETINGS

The American Association for the Advancement of Science has an opening for a Deputy Head of Meetings.

The qualified candidate will work directly with the Head of Meetings in developing the scientific programs for the various AAAS meetings and conferences. He or she will also assist in supervising the staff operations involved in making logistical and marketing arrangements for AAAS meetings and conferences.

The incumbent will have general knowledge about recent developments in the broad spectrum of science and technology as well as Ph.D. (or equivalent) in science. The ideal candidate will have supervisory experience along with a knowledge of budget development and fiscal management.

Reply to: Debra Wright, Employment Manager
AAAS, Office of Human Resources,
1333 H Street, NW, Suite 854
Washington, DC 20005

EOE

**An opportunity has arisen
at a leading pharmaceutical
research centre in Paris**

NEUROBIOLOGIST

To lead the biochemical laboratory of a Neuroscience division, conducting in vivo/ex vivo research; the scientific focus is on intracerebral microdialysis and the determination of the levels of monoamines and metabolites in the areas concerned. Candidates should be established research scientists who combine a high level of post-doctoral achievement

(thesis/PhD) with a sound knowledge of applied research into the discovery of new drugs.

Please send a handwritten, CV together with details of published works and salary requirements, quoting ref. 4125 to Média-System, 6 impasse des Deux Cousins, 75849 Paris Cedex 17.



Research Toxicologist

CIBA-GEIGY's Agricultural Division has an opening for a Research Toxicologist at its Environmental Health Center located in Farmington, CT. Responsibilities include working with a growing multidisciplinary team evaluating chemical effects on cell adhesion molecules and cell-cell interactions.

The successful candidate will have a Ph.D. in cell biology, biochemistry or immunology. One to three years relevant experience with immunofluorescence, mammalian cell tissue culture, receptor isolation and electrophoresis is desirable.

CIBA-GEIGY Corporation offers on-going growth opportunities, excellent salaries and an attractive package of paid company benefits. The Environmental Health Center is adjacent to the University of Connecticut Health Center, in one of the state's most attractive semi-rural towns. To apply, please send your resume, a brief description of your experience, and your salary requirements to: **Human Resources Coordinator, CIBA-GEIGY Corporation, Agricultural Division, 400 Farmington Avenue, Farmington, CT 06032.** We Are An Equal Opportunity Employer M/F/H/V.

Science Serving Mankind

CIBA-GEIGY



Clinical & Experimental Immunology

Contribute to the next breakthrough in peptide drug discovery.

At Immunobiology Research Institute, our small team of scientists is dedicated to improving the quality of life for mankind through the research and development of peptide drugs. Here, you'll have all the advantages you would hope to find with a small company while enjoying all the benefits and security you'd expect from a Johnson & Johnson Company.

Right now, we are seeking a Research Immunologist to play a major role in the development of protocols for the evaluation of immune regulators *in vitro* and in animal model studies. This will include evaluating literature, contacting investigators, developing experimental plans, and communicating results and findings to upper management. You will help locate, evaluate, select, track and monitor external laboratories performing studies. 20-30% travel required to study sites.

To qualify, you must possess a PhD in Immunology, Virology or related field and 0-2 years' post-doctoral or industry experience. Experience with animal models of autoimmunity, immune regulation in man and/or viral pathogenesis is also required.

In return for your talent, you'll be rewarded with a competitive salary, extensive benefits, and the opportunity to work alongside the brightest minds in the pharmaceutical industry. For consideration, send your resume to:

Director, Human Resources, Immunobiology Research Institute,
Route 22 East, P.O. Box 999, Annandale, NJ 08801-0999.
We are an equal opportunity employer.

Immunobiology Research Institute

A **Johnson & Johnson** Company

Leadership Beyond Compliance

CLINICAL GENETICIST/ EPIDEMIOLOGIST NATIONAL CANCER INSTITUTE

The National Cancer Institute, National Institutes of Health, is seeking applicants for Chief, Clinical Genetics Section, Clinical Epidemiology Branch, Epidemiology and Biostatistics Program. This scientist would head an intramural group which initiates research to provide new insights into the origins of human cancer. The section investigates peculiarities of cancer occurrence through the disciplines of clinical medicine and epidemiology and collaborations with cellular and molecular geneticists. Current emphasis is given to the clinical delineation of cancer family syndromes and disorders that predispose to cancer such as the neurofibromatoses and some birth defects, to gene mapping studies, and to studies of the late effects of cancer treatments including reproductive toxicity. Liaison is maintained with many clinical services throughout the Washington area and beyond, as well as with the NIH Interinstitute Medical Genetics Program which is accredited by the American Board of Medical Genetics.

Applicants should have a M.D. or Ph.D. or equivalent training in clinical genetics, epidemiology or a related field and be devoted to conducting studies related to cancer etiology. The type of appointment and salary are dependent on experience and qualifications. Starting salary ranges from \$50,000-70,000. In addition to the base pay, the M.D. candidate may be eligible for a physician's comparability allowance of up to \$15,000 depending on service and qualifications. Applicants should send their curriculum vitae and bibliography (or requests for further information) to:

Dr. Dilys M. Parry
Clinical Epidemiology Branch
Division of Cancer Etiology
National Cancer Institute
Executive Plaza North
Room 400
Bethesda, Maryland 20892
(301) 496-4947



U. S. Citizenship required
An Equal Opportunity Employer

Chair

Department of Biochemistry and Molecular Biology

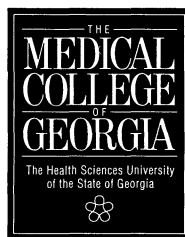
The Medical College of Georgia invites nominations and applications for the position of Professor and Chair of a newly restructured Department of Biochemistry and Molecular Biology in the School of Medicine. We seek a leader who can further develop and maintain academic excellence for this department. The successful candidate must have:

- an established record of major research accomplishment in the application of modern approaches to any area of biochemistry, molecular biology or cell biology relevant to human health and disease;
- the ability to attract and aid the development of first-rate faculty members; and
- a commitment to excellent medical and graduate education.

Applicants should provide a curriculum vitae, summary of professional goals, and the names of three references by Nov. 30, 1990 to:

R. W. Caldwell, Ph.D.
**Biochemistry and Molecular
Biology Search**
**Department of Pharmacology
and Toxicology**
Medical College of Georgia
Augusta, Georgia 30912.

Provisions of the Georgia Open-Records Act apply.



An Affirmative Action/Equal Opportunity Employer

Join Wyeth-Ayerst Laboratories, one of the world's largest pharmaceutical research and development groups. Now is your opportunity to become an integral member of our fast-paced, innovative team at our Princeton, NJ research facility.

Scientist Neuropharmacology

Primary responsibility will be conceiving, planning, conducting and supervising experimentation directed toward the discovery of novel psychotropic agents. This will include performing and directing research directly related to the discovery of compounds acting at muscarinic and other neuroreceptors. Collaboration with our molecular biology group is key, along with providing support to other drug discovery programs.

The successful candidate will have a Ph.D. in Pharmacology, Biochemistry, Neuroscience or a related discipline with two or more years of postdoctoral experience, a good publication record and excellent communication skills. Experience with cell culture, functional assessment of cloned receptors in chosen cell lines, a pharmacological background with an emphasis on neuropharmacology are highly desirable as is the motivation to publish the findings of novel, innovative research activities.

Wyeth-Ayerst offers an excellent compensation and benefits package in our highly professional environment. Please forward resume with salary requirements to: **WYETH-AYERST RESEARCH, Personnel Manager, CN 8000, Princeton, NJ 08643-8000.** An equal opportunity employer, M/F/H/V.



RESEARCH

HELP 80,000 PEOPLE HAVE A SECOND CHANCE.

Septic Shock is a deadly phenomenon which kills as many as 80,000 people every year. Taking away any thought of a second chance. And today, there just are no effective therapies.

At XOMA, we're trying to do something about that. We're working hard to develop new types of targeted drugs that combat the endotoxins responsible for Gram-negative sepsis and septic shock. If you are an independent thinker with a solid research background, we're looking for you.

Scientist I

Working in the Immunology Group, you will investigate new treatments in the field of sepsis. The ideal candidate must have a working knowledge of in vitro and in vivo immunological assays, have an M.S. with 4-8 years' experience, or a Ph.D. with 1-3 years' pertinent experience. Candidates with a strong background in Biochemistry, Immunology or a related field are encouraged to apply.

Experience in protein purification and characterization is desirable.

Your chance of a lifetime.

Here's your chance to help XOMA give others a second chance. We offer competitive salaries and benefits. Send your resume to: Technical Recruiter, XOMA Corporation, 2910 7th Street, Berkeley, CA 94710. EOE.

XOMA

POSITIONS OPEN

MEDICINAL CHEMISTRY, ASSISTANT/ASSOCIATE PROFESSOR. The College of Pharmacy invites applications for a 12-month, tenure-track faculty position beginning no later than 16 September 1991. Rank and salary will be based on experience. The successful candidate will be expected to establish an independent research program capable of attracting graduate students and extramural funding. Research emphases should include or be related to synthetic medicinal chemistry, natural products chemistry, bioorganic chemistry, biotechnology, computational chemistry, SAR approaches to receptor mechanisms, drug metabolism, or nuclear medicine. A Ph.D. degree is required. Preference will be given to candidates with postdoctoral or equivalent experience. The successful applicant will be expected to teach undergraduate medicinal chemistry. Interested candidates should submit a letter outlining their research and teaching interests, curriculum vitae, and the names, addresses, and telephone numbers of three references to: **Dean R. A. Ohvall, College of Pharmacy, Pharmacy Building 203, Oregon State University, Corvallis, OR 97331-3507.** Priority will be given to applications received prior to 31 October 1990. *Equal Opportunity/Affirmative Action Employer, responsive to the needs of dual-career couples.*

DEVELOPMENTAL BIOLOGIST

Iowa State University (ISU) is seeking candidates to fill an **ASSISTANT/ASSOCIATE PROFESSOR** level faculty position in developmental biology. The successful candidate will be expected to establish a competitive research program and to participate in graduate and undergraduate education. Applications are encouraged from individuals interested in any area of developmental biology involving animals, plants, or unicellular eukaryotes.

The successful candidate will have space in a new molecular biology building. Generous start-up funds are available. The department contains active, collaborative research groups in genetics, neurobiology, developmental biology, cell biology, molecular biology, and physiology. *ISU is an Equal Opportunity/Affirmative Action Employer. Women and members of minority groups are encouraged to apply.* Deadline for application is 17 December 1990, or until the positions are filled. Candidates should send current curriculum vitae containing a description of research interests and arrange for three letters of recommendation to be sent to:

Dr. Jack R. Girton
Chair, Faculty Search Committee
Department of Zoology and Genetics
Iowa State University
Ames, IA 50011

BIOLOGICAL OCEANOGRAPHY SCRIPPS INSTITUTION OF OCEANOGRAPHY

Applications are invited for **ASSISTANT, ASSOCIATE or FULL PROFESSORIAL** positions (tenure track/tenured); rank, level and salary commensurate with qualifications and experience, based on University of California pay scale. We are especially interested in interdisciplinary oceanographer-biologists who have had training and experience as oceanographers; those who can teach a kind of oceanography that emphasizes the measurement of the processes and events in the ocean itself as a means to understanding oceanic biology. Preference will be given to candidates whose research emphasizes aspects of the interaction between population biology, sea water chemistry, and the physics of water motion. Research topics which emphasize multiple scale interactions and can be generalized to gyre or global scale issues are sought. Candidates will be expected to conduct an active research program supported by extramural funds and to be involved in graduate teaching and the supervision of graduate students. Applicants must hold a Ph.D. degree, or be advanced to candidacy, in an appropriate field, and have demonstrated excellence and independence in research. Assistant level candidates will be expected to show evidence of their potential through a publication record appropriate for their experience and letters of recommendation; associate or full professorial-level candidates must show evidence of a strong research record. Send letter of application including description of research interests, list of publications, résumé of teaching experience, and names/addresses of five references to: **Chair, Biological Oceanography Search, SIO Graduate Department 0208, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0208.** Closing date for applications is 15 November 1990. *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

GENETICISTS/MOLECULAR GENETICISTS

Iowa State University (ISU) is seeking candidates to fill several **ASSISTANT/ASSOCIATE PROFESSOR** level faculty positions in molecular genetics. Successful candidates will be expected to establish a competitive research program and to participate in graduate and undergraduate education. Applications are encouraged from individuals interested in all areas of genetics, including animal, plant, microbial, population/evolutionary, or cytogenetics.

The successful candidates will have space in a new molecular biology building. Generous start-up funds are available. The department contains active, collaborative research groups in genetics, neurobiology, developmental biology, cell biology, molecular biology, and physiology. *ISU is an Equal Opportunity/Affirmative Action Employer. Women and members of minority groups are encouraged to apply.* Deadline for application is 7 December 1990, or until the positions are filled. Candidates should send current curriculum vitae containing a description of research interests and arrange for three letters of recommendation to be sent to:

Dr. Jack R. Girton
Chair, Faculty Search Committee
Department of Zoology and Genetics
Iowa State University
Ames, IA 50011

PROFESSOR OF BOTANY AND DIRECTOR DUKE UNIVERSITY PHYTOTRON

The Department of Botany seeks a director for the Duke University Phytotron. This tenured faculty appointment will involve 50% teaching/research and 50% administration. The position will be at an academic and salary level that is commensurate with the experience of the successful candidate. Candidates are encouraged to apply who seek an opportunity to apply the existing capabilities of this exceptional, national environmental control facility to their own research, and who will strive to improve and develop it. Submit curriculum vitae, list of publications, statement of research plans, and names and telephone numbers of four referees to: **Phytotron Director Search Committee, Department of Botany, Duke University, Durham, NC 27706** by 1 November 1990. *Duke University is an Equal Opportunity Employer.*

SEARCH CONTINUES: VICE CHAIR AND PROFESSOR OF PHARMACOLOGY. The Department of Pharmaceutical Sciences at Idaho State University (ISU) College of Pharmacy is continuing its search for a vice chair for Boise programs. The vice chair will coordinate pharmacology graduate and research programs for the department at the Boise Veterans Administration Medical Center (VAMC). Candidates must have a Ph.D. in pharmacology or a closely related discipline, a vigorous research program supported by extramural funding, and a distinguished record of accomplishments. The successful candidate will have substantial time available for research but will be expected to participate in the instruction of professional and graduate students. Areas of research interests at the Boise VAMC include an emphasis in gerontology, cardiovascular pharmacology, immunopharmacology, and drug metabolism. Nominations and applications (including curriculum vitae and names of three references) should be sent to: **Chair, Search Committee, Clinical Pharmacology and Gerontology Research Unit, VA Medical Center, 500 West Fort Street, Boise, ID 83702.** *ISU is an Equal Opportunity Employer.*

DIRECTOR, VIROLOGY LABORATORY

The Department of Laboratory Medicine of Yale University School of Medicine is seeking a director for the Virology Reference Laboratory at the West Haven Veterans Administration (VA) Medical Center. A Yale faculty position is available with rank dependent upon qualifications. The appointee must have an M.D. or Ph.D. degree and appropriate training and/or experience in diagnostic virology and molecular biology. The appointee will oversee a clinical virology reference laboratory, which includes both retrovirus and general virology sections, and establish an independent research program. The anticipated starting date is on or before 1 July 1991 with application deadline of 31 December 1990. Applicants should send curriculum vitae to: **Marie L. Landry, M.D., Virology Laboratory/151B, VA Medical Center, West Haven, CT 06516.** *Yale University and the VA are Equal Opportunity/Affirmative Action Employers. U.S. citizenship is required.*

POSITIONS OPEN



CHAIRMAN BIOCHEMISTRY AND MOLECULAR BIOLOGY

The University of Miami School of Medicine is seeking applications and nominations for the position of professor and chairman of the Department of Biochemistry and Molecular Biology. The person filling this position will have the unique opportunity to greatly expand the department's capabilities in the area of molecular biology. Substantial funds for the development of the department are available through a generous award from the Lucille P. Markey Charitable Trust as well as considerable funding from the university. In addition to funding the new chairman, these resources will be used to support at least ten new investigators, as well as start-up funds and major new equipment. The department will occupy a new seven-story building which will be completed in the fall of 1990. The department includes 16 faculty members (tenure track) with full-time primary appointments and a well-established graduate program with 43 trainees.

The applicant must have a Ph.D., M.D., or equivalent degree, be internationally recognized for contributions to molecular biological research, have a commitment to educational activities, and have clearly demonstrated leadership and administrative capabilities. The successful candidate is expected to be an outstanding scientist with a strong ongoing, independent, and well-funded research program. This person will be expected to promote the molecular biological research capabilities of the department, the medical school, and the university, and to recruit outstanding scientists to the faculty.

Interested applicants should submit curriculum vitae including the names of three references to: **Dr. James D. Potter, Search Committee Chairman, Department of Pharmacology, University of Miami, P.O. Box 016189, Miami, FL 33101.** *An Equal Opportunity/Affirmative Action Employer.*

UNIVERSITY OF KENTUCKY DEAN OF THE COLLEGE OF ARTS AND SCIENCES

The University of Kentucky invites nominations and applications for the position of dean of the College of Arts and Sciences. Qualifications include demonstrated academic leadership, significant scholarly achievement, a commitment to excellence in undergraduate and graduate education, and experience in or potential for success in administration.

Applications from and nominations of women and minorities are encouraged. Hiring practices incorporate an aggressive family employment policy. Applications or nominations will be accepted until the position is filled; target date: 1 July 1991. Send nominations and applications with a summary of relevant professional experience, curriculum vitae, and the names, addresses, and telephone numbers of four references to: **Dr. James Wells, Chair, Dean of Arts and Sciences Search Committee, c/o Office of the Chancellor, Lexington Campus, 111 Administration Building, University of Kentucky, Lexington, KY 40506-0032.** *The University of Kentucky is an Affirmative Action/Equal Opportunity Employer.*

DIRECTOR, LYMPHOKINE RESEARCH

Tampa Bay Research Institute (formerly Showa University Research Institute) is a nonprofit biomedical research institute established in the state of Florida since 1981.

A director of laboratory is being sought to head up a new research program in the area of lymphokine, cytokine, and modulator substances. The newly created laboratory will complement the existing research programs in molecular virology, immunogenetics, and new drug development for AIDS. The incumbent is expected to have funded research program and proven record of extramural support.

Interested individuals should send letter of application, a brief statement of research interest, and names of four references by 30 November 1990 to:

**Chairman of Search Committee
Tampa Bay Research Institute
10900 Roosevelt Boulevard
St. Petersburg, FL 33716**

The University of Toledo

Announces An Expanded Search for

The Nippon Electric Glass Company, Ltd. Endowed Chair in Silicate & Materials Science

The University of Toledo invites nominations and applications for a newly established, endowed faculty chair. The University is seeking an internationally recognized research scholar with a demonstrated record of major levels of external support who will bring a well-recognized program in an area broadly defined as silicate science and/or materials research. The holder of this faculty chair will be expected to interact strongly with University faculty who have related research programs in the Departments of Physics and Astronomy, Chemistry, Geology, and in the College of Engineering. In addition, this person will be encouraged to interact with industrial scientists and engineers in related fields of materials science.

The successful candidate will qualify for a tenured professorship in an appropriate academic department and will be considered for the Directorship of a new, interdisciplinary Materials Science Research Center. In addition, s/he may wish to serve as director of the Eitel Institute for Silicates and Ceramics Research. Other materials science-related organizations at UT include the Thin-Films Research Institute, the Coal Characterization Laboratory, and the Polymer Institute.

Consideration of qualified candidates will begin immediately. Interviews are expected to begin in October with the successful applicant to be identified by January 1991. Interested candidates should send a letter of application, current resume, and three letters of reference to:

Dr. Alvin D. Compaan or Dr. William A. Kneller

Co-chairs, Search Advisory Committee

Department of Physics & Astronomy

The University of Toledo

Toledo, Ohio 43606

Facsimile: (419) 537-2723

Ph: (419) 537-2147/-4787

The University of Toledo is an Affirmative Action and Equal Opportunity Employer.

Senior Research Scientist (Research & Development)

Join the dynamic team of professionals at Baxter Healthcare Corporation, Edwards Laboratories. We are a highly-successful medical product manufacturer located in Southern California, with an excellent opportunity available for a Sr. Research Scientist.

You will utilize your extensive knowledge of and experience with enzymology, cell biology and biochemistry to oversee and coordinate all cell biology research. Primary responsibilities will involve working with collagenase in developing a system for its procurement and purification, along with designing and implementing a vertical integration plan. Additionally, you will work with biochemists in developing in-vitro/in-vivo testing for collagenase as well as QA validation and sterilization procedures.

Requirements include an MS or PhD in Biochemistry, Molecular Biology, Cell Biology, Immunology or a similar field. Outstanding management and communication skills are essential, along with a willingness to travel frequently.

At Baxter, Edwards Laboratories, our employees enjoy competitive salaries and excellent benefits in a quality work environment. Please submit your resume to: **E. Wattiez, Employment Department, Baxter Healthcare Corporation, Edwards CVS Division, 17221 Red Hill Avenue, Irvine, California 92714.** We are an equal opportunity employer m/f/h.

AN IMPORTANT PHARMACEUTICAL RESEARCH CENTER

located in PARIS area (France)

is looking for

neuroscientist

**in experimental pharmacology
for behavioral, memory and
degenerative diseases.**

Interested in discovering new therapeutic substances targeted for neurogeriatrics, the successful candidate will be in charge of conducting a complete research program, including training and supervision of several technicians.

Educational requirements include Ph.D degree as well as post-doctorate studies; top reference will be given to candidates with professional experience or, otherwise, excellent knowledge of applied neuropharmacology.

Address curriculum vitae, expected salary and hand-written cover letter to the following address:
**PUBLIVAL/9038 - 27, Route des Gardes
92190 MEUDON (FRANCE).**



ONCOGEN

ONCOGEN, a division of Bristol-Myers Squibb and a leader in biotechnology, performs research dedicated to pursuing novel approaches to the development of therapeutic products in the areas of immunology, infectious diseases and cancer. ONCOGEN is currently recruiting for the following position:

Scientist Protein Purification

Responsibilities include exploration of novel protein purification and characterization technologies with application potential for production and analysis of clinical grade products, development of protocols for purification of antibodies and growth factors using techniques suitable for further scaleup, and oversight of protein purification. Requires PhD in biochemistry, chemistry or related field, and 3 to 5 years' protein purification experience. Previous application of novel purification characterization technologies desirable. Please reference position #90-054.

ONCOGEN offers a creative work environment, competitive salaries and an excellent benefit package. Qualified applicants, please submit resume to: **J. McGough, ONCOGEN, 3005 First Avenue, Seattle, WA 98121.** We are an equal opportunity employer.



A Bristol-Myers Squibb Company

POSITIONS OPEN

DEAN, SCHOOL OF PUBLIC HEALTH

The University of California at Berkeley invites applications/nominations for the position of Dean of the School of Public Health.

The school is responsible for instruction and professional preparation in public health on both the Berkeley and San Francisco campuses of the university. The school, located on the Berkeley campus, is composed of two departments: biomedical and environmental health sciences, and social and administrative health sciences, which offer nearly a dozen curricular areas of specialization. Over 400 graduate students are enrolled in programs for the professional degrees, M.P.H. and Dr.P.H., academic degrees that lead to the M.A., M.S., and Ph.D. degrees, and joint degree programs with other departments and schools.

Among the qualifications that are sought in the person to be appointed are notable accomplishments in health sciences and a level of professional scholarship that warrants appointment to the full professorship at Berkeley, a successful experience in academic administration, evidence of a perception of the needs and directions of the field of public health in general, and of a school of public health in particular. Thus the dean will be closely involved in curricular developments in the school not only as it relates to a campus with no medical school (Berkeley), but also as it relates to the university's medical center campus (San Francisco). Active encouragement of research and of programs to meet community and societal needs, coordination, and promotion of the school's programs jointly administered with other educational units on the Berkeley campus are integral to a successful tenure as dean.

Nominations or applications must be received by 1 December 1990. A detailed curriculum vitae, a list of three to five professional references, and a general statement on education for public health, and current challenges facing schools of public health, should be sent to: Dean of Public Health Search Committee, Office of the Provost, Professional Schools and Colleges, 700 University Hall, University of California at Berkeley, Berkeley, CA 94720.

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

CLINICAL MOLECULAR DIAGNOSTIC SUPERVISOR

Vivigen Laboratories is seeking an experienced clinical molecular diagnostic technologist with supervisory experience or skills.

Please send résumé to:

Clark A. Reynolds
c/o Vivigen, Inc.
2000 Vivigen Way
Santa Fe, NM 87505

FACULTY POSITION FOR NMR SCIENTIST

The Pittsburgh NMR Center for Biomedical Research is a multidisciplinary facility administered jointly by the University of Pittsburgh and Carnegie Mellon University with participating faculty from both universities. The NMR Center is searching for an outstanding established or accomplished junior faculty NMR scientist to fill a faculty position at a level commensurate with experience and accomplishments. The primary appointment will be at the University of Pittsburgh. Applicants interested in technical development in any area of NMR imaging, in vivo spectroscopy, or related computational problems are encouraged to apply. The successful candidate will be expected primarily to pursue an independent research program. A Ph.D. in physics, physical chemistry, or equivalent experience is required. In addition, there are many opportunities for collaboration. The center houses a 40-cm, 4.7-Tesla Bruker Biospec II and a 31-cm, 2.4-Tesla home-built imaging spectrometer. Personnel in the center also have access to a 7.0-Tesla, 15-cm Bruker Biospec II, a Bruker AM-500 spectrometer, and a Bruker AM-300 spectrometer. Interested applicants should send curriculum vitae, representative reprints, and three letters of recommendation to:

Dr. Chien Ho
Pittsburgh NMR Center for Biomedical Research
Carnegie Mellon University
4400 Fifth Avenue
Pittsburgh, PA 15213

An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

The University of Washington invites applications for the position of **DIRECTOR** of the Institute for Environmental Studies (IES). The director is expected to stimulate development of interdisciplinary graduate programs, research projects, and other activities at the science/environment problem-solving interface. IES faculty, including the director, are jointly appointed by the IES and by an academic department. Selection criteria for the director include the individual's scholarly accomplishments and leadership ability.

Applications, including curriculum vitae, bibliography, and the names of three references, should be sent to: **IES Search Committee, Graduate School AG-10, University of Washington, Seattle, WA 98195**, and should be received by 15 November 1990. *The University of Washington is an Equal Opportunity/Affirmative Action Employer.*

APPLIED SCIENTIST/MANAGER sought, M.S., Ph.D., for water quality evaluation, environmental analysis, and permitting. Expertise necessary in interpretation of chemical characteristics of natural waters, with additional experience sought in botany, wildlife, wetlands, and/or statistics. Training and analytical chemistry essential. Send résumé to: **Personnel Department, Breedlove, Dennis and Associates, Inc., 4301 Metric Drive, Winter Park, FL 32792.** *An Equal Opportunity Employer.*

International Board for Plant Genetic Resources (IB-PGR) announces that it has begun a joint project with the International Development Research Centre (IDRC) to develop a guidebook/manual that will enable personnel in genetic resources programs to construct documentation systems that are tailored to their needs.

We are seeking a dynamic, innovative individual who is able to interact well, for long periods of time, with people from varied cultural backgrounds and be able to work well for long periods of time away from his or her host country.

At least an M.S. in the agricultural/biological sciences, the degree earned must represent experience in scientific experimental work. Experience in applying the personal computer in problem solving in the biological sciences, use of statistical and database management systems software, and 3 to 5 years in the documentation of biological systems is a must. Extensive experience in teaching and training and the production of training matter in biological sciences is preferable.

The individual will be employed as a documentation associate based in Rome, Italy, under the direction of the documentation coordinator. Salary will be commensurate with experience.

Application: Potential candidates should write to: **Director, IBPGR, c/o Food and Agriculture Organization of the United Nations, Via delle Sette Chiese 142, 00145 Rome, Italy (FAX: 396-5750309)**, enclosing full curriculum vitae and a list of three referees by 15 October 1990.

FACULTY POSITIONS IN VIROLOGY AND IMMUNOLOGY

Applications are invited for tenure and tenure-track faculty positions in the Department of Microbiology and Immunology at Loyola University Chicago, Stritch School of Medicine. We are seeking talented investigators whose research interests are in virology or molecular immunology to join a growing interactive group of investigators. Candidates are expected to develop independent, externally funded, high-quality research programs. Excellent new facilities and attractive start-up funds are available. Submit curriculum vitae, statement of research interest, and a list of three references to: **Dr. Katherine L. Knight, Chairperson, Department of Microbiology and Immunology, Loyola University Chicago, Stritch School of Medicine, 2160 South First Avenue, Maywood, IL 60153.** *Loyola University Chicago is an Equal Opportunity/Affirmative Action Employer.*

BIOCHEMISTRY, TENURE TRACK. Dickinson College, spring or fall of 1991. Ph.D. in biochemistry, with commitment to undergraduate chemical education. A research program with undergraduates is expected. Dickinson is a liberal arts college with ACS accreditation, six chemistry faculty, and new biochemistry teaching and research laboratories. Send résumé, undergraduate and graduate transcripts, statement of teaching philosophy, research plans, and three letters of recommendation to: **Professor William Schearer, Dickinson College, P.O. Box 1773, Carlisle, PA 17013-2896.** *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

EPIDEMIOLOGIST

Lawrence Berkeley Laboratory is seeking an epidemiologist who will provide intellectual leadership and program direction for the Comprehensive Epidemiologic Data Resource (CEDR) Information Systems project. The object is to develop and provide an information resource to disseminate epidemiologic data resulting from DOE research. Specific responsibilities include liaison with the DOE, the epidemiologic research community, the data collection sites, and the setting of the needed CEDR Information System. There exists the possibility for a faculty/teaching appointment with the School of Public Health at the University of California, Berkeley. Requires significant experience in epidemiologic/public health activities with emphasis in the areas of health surveillance and occupational health. Familiarity with computer systems used in management and analysis of epidemiologic data. Ph.D. and/or experience in epidemiology in a relevant public health field preferred. Personnel and project supervisory experience is desirable.

Salary: \$3900 to \$7500 per month, excellent benefits. To apply, submit résumé and salary history to: **Employment Office, Building 90/1042 (specify Job # C/6055), Lawrence Berkeley Laboratory, 1 Cyclotron Road, Berkeley, CA 94720.** *An Equal Opportunity Employer, M/F/H.*



LAWRENCE
BERKELEY
LABORATORY

FACULTY POSITION IN PHARMACOLOGY

The Department of Pharmacology, University of Tennessee, Memphis, is seeking candidates for two tenure-track positions available 1 July 1991 and one tenure-track position available immediately at the rank of **ASSISTANT OR ASSOCIATE PROFESSOR**, dependent on experience. Candidates should possess the Ph.D. degree in pharmacology, biochemistry, or a related discipline, or the M.D. degree, and should have demonstrated excellence in research and a commitment to teaching. Applicants should have experience in application of modern constructs of biochemistry, molecular biology, or cell biology to problems of interest to pharmacology. Areas of particular interest include research in transmembrane signaling, tumor biology, cardiovascular pharmacology, and neurochemistry. Candidates will be expected to establish their independent research programs, and participate in teaching of pharmacology to professional and graduate students. *Applications from minority candidates and women are strongly encouraged.* Please submit curriculum vitae, the names of three references, and a brief statement of future research plans to: **Murray Heimberg, Ph.D., M.D., Chairman, Department of Pharmacology, University of Tennessee, Memphis, The Health Science Center, Memphis, TN 38163.** Search will continue until positions have been filled. *The University of Tennessee, Memphis, is an Equal Employment Opportunity/Title IX/Section 504/Affirmative Action Employer.*

FACULTY POSITION FOR BASIC SCIENTIST INTERESTED IN CLINICALLY RELATED RESEARCH

A faculty position as Director of Research is available for a basic scientist with an independent research program applicable to basic and clinical problems associated with plastic and reconstructive surgery. These could include aspects of wound healing, microcirculatory function, and other areas. Applicants should have a Ph.D. or M.D. degree and have evidence of an independent research program with extramural, peer-reviewed funding. The ability to involve other faculty and surgical residents in this research program is desirable.

Considerable support for research, including new laboratory facilities, is available through the Division of Plastic, Reconstructive, and Hand Surgery and from the Shriners Burns Institute which is affiliated with the University of Cincinnati, College of Medicine. Other basic scientists in the Department of Surgery are currently working in areas of immunology, bacteria-host interaction in the urinary tract, epithelial cell culture, molecular genetics of the Y chromosome, and structural and functional studies of neuropeptides.

Salary is negotiable and commensurate with experience. Please send curriculum vitae, a summary of research interests, and names of three references to: **Henry W. Neale, M.D., F.A.C.S., Professor and Chairman, Division of Plastic, Reconstructive, and Hand Surgery, 231 Bethesda Avenue, Cincinnati, OH 45267-0558.**

Bristol-Myers Squibb Pharmaceutical Research Institute

Bristol-Myers Squibb Pharmaceutical Research Institute is continuing to expand our efforts in basic biomedical research. New research laboratories are currently under construction at our research headquarters in Princeton, New Jersey. More than at any time in the past, our commitment to basic biomedical research, both at the Institute and through our academic research alliances has never been stronger.

Research Associates

Molecular Biology

The focus of this position will be on cloning and expressing mammalian genes in cultured cells. Demonstrated skill in cloning, sequencing and vector construction and exposure to transformation/transfection of mammalian cells using a gene pulser are preferred. Reply to **Dept. #152A.**

Developmental Biology

This position is with a basic research program in developmental genetics utilizing transgenic mice, inbred and mutant mice to study protooncogene expression during development. Training in embryo culture, micromanipulation and tissue culture techniques will be provided. Training in animal science and/or experience with rodents would be an asset. Reply to **Dept. #152B.**

Protein Biochemist

This position will focus on the purification of recombinant proteins from cultured cells using electrophoresis, HPLC, and chromatographic methods. Reply to **Dept. #152C.**

Cardiovascular Pharmacology

Perform large animal in vivo studies to assess cardiovascular and electrophysiological effects of novel pharmaceutical agents. Proficiency in whole animal surgical techniques is necessary. Reply to **Dept. #152D.**

Tissue Culture

Two positions available in the Molecular Biology and Molecular Pharmacology Departments for individuals with experience in running tissue culture operations. Responsibilities include maintenance and cultivation of established and new cell lines, primary cell culture and cloning. Reply to **Dept. #152E.**

Drug Metabolism

Develop assays and determine drug/metabolite concentrations in biological samples utilizing HPLC, GLC, RIA and radioenzymatic receptor assays. Familiarity with GLP is necessary. Reply to **Dept. #152F.**

Cholesterol Metabolism

Evaluate synthetic compounds for their activity as cholesterol synthesis inhibitors in small animal models. Experience working with small animals and radioisotopes is necessary. Reply to **Dept. #152G.**

Macromolecular Crystallography

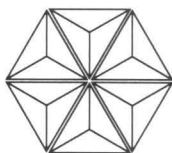
Purify and grow protein crystals for basic research. Protein purification experience is necessary. Protein crystallization experience would be an asset. Reply to **Dept. #152 H.**

In Situ Hybridization

Establish an in situ hybridization core unit to interact with ongoing basic research on molecular characterizations of oncogenes utilizing in situ hybridization techniques, preparation of tissue sections and probes. Reply to **Dept. #152J.**

Candidates for these positions should possess a BS or MS in a relevant scientific discipline along with several years relevant experience.

Please forward your resume to (including dept. code#): **Bristol-Myers Squibb Pharmaceutical Research Institute, Human Resources Department, P.O. Box 4000, Princeton, NJ 08543-4000.** An equal opportunity employer.



Bristol-Myers Squibb Company

Assistant/ Associate Professor

The Department of Molecular Biology, UMDNJ-School of Osteopathic Medicine, invites applications for tenure-track positions at the Assistant/Associate Professor level. Applicants must possess a Ph.D., M.D. or D.O. degree and have an active, independent research program with extramural funding. The successful candidate will be expected to develop an innovative research program and participate in the instruction of Biochemistry, Microbiology or Pharmacology to osteopathic medical students. Preference will be given to candidates whose research focuses upon mechanisms of signal-transduction, molecular immunology, or receptor regulation.

Applicants should submit a letter of interest, C.V. and three current letters of reference by November 1, 1990 to: **Dr. Richard Schimmel, Acting Assistant Dean for Basic Sciences, The University of Medicine & Dentistry of New Jersey-School of Osteopathic Medicine, 401 South Central Plaza, Stratford, NJ 08084.** The UMDNJ is an affirmative action/equal employment opportunity employer, M/F/H/V, and a member of the University Health System of New Jersey.



MICROTEK

RESEARCH AND DEVELOPMENT, LTD

Microtek, a leader in the development of products for the aquaculture and agriculture industries is expanding the scope of its research and development effort into new areas. We are seeking qualified individuals for the following positions:

Project Leader/Immunology: The successful candidate will have a Ph.D. with at least 3 years of post-doctoral training and/or industrial experience. Knowledge in the areas of cellular immunology, production and purification of monoclonal antibodies and immunoassays (ELISA) is essential. The ability to manage a research project(s) is necessary.

Scientists: Several positions are open at the Post-doctoral, M.Sc. and B.Sc. levels. Candidates should have appropriate degrees in immunology, molecular biology or biochemistry and have a solid record of academic achievement. The successful candidates will participate in research projects such as the development of immunodiagnostics, therapeutic delivery systems and vaccines.

Microtek offers competitive salaries, a comprehensive benefits package, and a stimulating work environment. Microtek is located on Vancouver Island near Victoria, one of the most desirable locations in Canada.

Please send C.V., including a list of references, in confidence to:

**Dept. of Human Resources
Microtek R&D, Ltd
P.O. Box 2460
Sidney, B.C. V8L 3Y3**

For a healthier environment, we are the solution.

Environmental concerns call for a wide range of highly sophisticated capabilities. At International Technology Corporation, we're applying proven technologies to the environmental problems of today and tomorrow. In fact, we are an industry leader, providing comprehensive environmental and analytical services to government and private industry.

From the first stages of analysis to final implementation, we do it all, which is why International Technology Corporation is the choice for opportunity-seeking professionals. We have an opportunity available in **Pittsburgh, Pennsylvania** for:

MANAGER RISK ASSESSMENT — will manage group of risk assessment professionals. Requires PhD in technical/science discipline and must have 5+ years experience in writing environmental risk assessments.

For immediate consideration, please send resume and salary requirements to: **Ray Janko, Manager, Professional Staffing, Dept. MD/SM, International Technology Corporation, 2790 Mossdale Blvd., Monroeville, PA 15146.** An Equal Opportunity Employer M/F/H/V.



**INTERNATIONAL
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RESEARCH SCIENTISTS

PANLABS is expanding its U.S. laboratory facilities. We have opportunities for scientists with a demonstrated record of scientific innovation and independence. Positions available:

Ph.D. - Molecular Genetics

Responsibilities include cloning and characterization of gene clusters for the biosynthesis of secondary metabolites, and the genetic manipulation of industrial microbes for improved production or development of novel bioprocesses. Position requires experience in molecular genetics of actinomycetes, experience with other systems desirable.

Ph.D. - Chemist

Responsibilities include the characterization of natural products and biosynthetic intermediates. Candidates must have demonstrated experience in isolation and structure elucidation of secondary metabolites and determination of biosynthetic pathways. Candidates must have several years of experience, industrial experience desirable. Broad experience in analytical and synthetic chemistry is desirable.

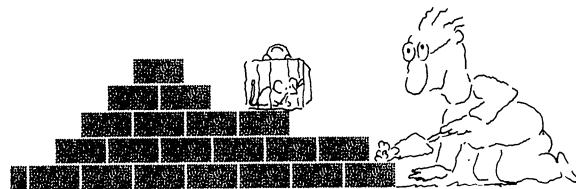
Candidates should have good supervisory and communication skills, publication record, and a strong desire to work with a team.

PANLABS is a growing U.S. based international company that has provided R&D services to pharmaceutical companies and the fermentation industry worldwide for 20 years. Located in the high tech corridor north of Seattle, PANLABS offers competitive salaries and benefits. Submit CV with names and phone numbers of 3 references to:

**PANLABS, INC.
Attn: Human Resources Manager
11804 North Creek Parkway South
Bothell, Washington 98011**

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Let the free Science product information service put you in touch with the vendors whose products you will need.

Simply write us a letter stating the specifics about your proposed lab and the instruments and supplies you need. We will do the rest. Write to:

**SCIENCE Magazine
New Lab Service Department
1515 Broadway
New York, NY 10036**

The Global Weekly of Research
SCIENCE

MACROMOLECULAR NMR SPECTROSCOPIST

Lilly Research Laboratories, a division of Eli Lilly and Company, has an opening for an Associate Scientist who will collaborate with established groups from several disciplines to study the structure of proteins and their interactions with other biologically active molecules.

Candidates for the position should have a master's degree or a bachelor's degree with equivalent experience. Specific training in multidimensional NMR techniques is required. A strong background in biological and computer sciences is desirable.

The Lilly NMR laboratory is exceptionally well-equipped for macromolecular studies and includes a UNITY-500 spectrometer, a Silicon Graphics workstation, and the necessary software for advanced NMR processing and molecular calculations. Also available is access to a recently installed Cray 2S super computer. These facilities are housed in a recently completed suite of laboratories, which also include x-ray crystallography, vibrational spectroscopy, and computational chemistry.

Qualified candidates should send a curriculum vitae to:

Kristin Roehr
Scientific Recruitment Representative
Eli Lilly and Company
Lilly Corporate Center
Indianapolis, IN 46285

Equal Opportunity
Employer



Commitment to Excellence

ENVIRONMENTAL TOXICOLOGIST

The Dow Chemical Company, a recognized leader in Industrial Toxicology, has an exciting opportunity for an Environmental Toxicologist. This person will assume responsibility for the bioconcentration/metabolism area in our Environmental Toxicology and Chemistry Research Laboratory located in Midland, MI.

We are seeking an individual with doctoral level training who has demonstrated expertise in toxicokinetics of xenobiotics in aquatic animals. Strong communication skills, both written and oral, as well as excellent interpersonal skills are required to interact effectively in a team/work environment.

The Dow Chemical Company provides a stimulating and challenging scientific environment which allows for both scientific and professional growth. In addition, we offer a competitive salary and benefits package. Please send your resume to: **Technical Recruiting, Department ET-1, The Dow Chemical Company, 1801 Building, Midland, MI 48674.** An Equal Opportunity Employer M/F/H/V.



Pharmacologist

We are looking for a pharmacologist with broad-based training or experience. Our research programs are multi-disciplinary and focused around mathematical and computational chemistry for new lead discovery. We have a collaborative research program with several international pharmaceutical companies and require a pharmacologist with broad interests and knowledge in biochemical mechanisms as well as *in vivo* models. The position requires oversight of our limited pharmacology and toxicological screenings at contract laboratories or in the laboratory of our collaborating partners.

If you enjoy a small company environment where you make the difference, Biofor is an unusual opportunity. The ideal candidate will have a high energy level, be knowledgeable of the literature and understand the importance of interacting with computational and medicinal/synthetic chemists. Our salary and benefits package is competitive with industry norms, with the unusual opportunity for significant financial rewards related to your contributions. We are located in Northeastern Pennsylvania, known for its quality of life, outdoor recreational facilities, and close proximity to the Northeast corridor. Please send your resume to:

BIOFOR, LTD.
P.O. Box 629
Waverly, PA 18471



BIOFOR

THE ROYAL SOCIETY

NAPIER RESEARCH PROFESSORSHIP

The Royal Society invites applications for the Napier Research Professorship, tenable from 1 October 1991, for research into the causes of cancer including any corresponding or allied disease and the means of its prevention, cure and alleviation. The salary will be on the prevailing UFC professorial minimum plus 40% and include superannuation. The Napier Research Professor may bid for annual research expenses of £13 500 or higher and for support for a research or technical assistant, and there will be a start-up grant of up to £35 000. A successful applicant from overseas will receive assistance with removal expenses.

The appointment must be held in an appropriate higher educational or research institution in the UK. There is no restriction as to citizenship of candidates. The tenure is for five years in the first instance and is then renewable until retirement.

Application details are available from Mrs U.M.A. Tokle, The Royal Society, 6 Carlton House Terrace, London SW1Y 5AG (Fax 071-930 2170). The closing date for applications is 16 November 1990; no applications arriving after 4 p.m. on that date will be considered.

FACULTY POSITION Microbial Geneticist

Applications are invited for a tenure-track faculty position at the Waksman Institute with a joint appointment in the Department of Molecular Biology and Biochemistry. The research-oriented environment at the Piscataway campus includes research institutes and academic science departments of Rutgers University, the Robert Wood Johnson Medical School, and the Center for Advanced Biotechnology and Medicine. The Waksman Institute is expanding in the research areas of molecular developmental genetics, plant molecular biology, regulation of gene expression and structural molecular biology. Preference will be given to candidates with complementary research interests and who use bacteria, yeast or filamentous fungi. The successful applicant will be expected to conduct a vigorous independent research program and to participate in instructional activities. Recently renovated laboratory space and generous start-up funds are available.

Candidates should send a biographical sketch (with a list of publications and a description of research interests) and request that three letters of reference be sent to: **Dr. Joachim Messing, Director, The Waksman Institute, Rutgers, The State University of New Jersey, P.O. Box 759, Piscataway, NJ 08855-0759.**

THE STATE UNIVERSITY OF NEW JERSEY

RUTGERS

An Affirmative Action/Equal Opportunity Employer

POSITIONS OPEN

FACULTY POSITION IN ENVIRONMENTAL GEOLOGY, University of Virginia. Applications are invited for a full-time, tenure-track position in environmental geology within an interdisciplinary department. An interest and experience in one of the following fields is necessary: (i) paleontology as related to climate change, (ii) hydrogeology, (iii) clay geochemistry, and/or (iv) GIS and remote sensing. Candidates should be interested in participating in interdisciplinary research with ecologists, hydrologists, other geologists, and atmospheric scientists. Rank and salary will be commensurate with experience. Send statement of interests, curriculum vitae, and names of three referees by 15 October 1990 to: **Dr. H. H. Shugart, Chairman, Department of Environmental Sciences, Clark Hall, University of Virginia, Charlottesville, VA 22903.** *The University of Virginia is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITIONS IN PHYSIOLOGY AND BIOPHYSICS CASE WESTERN RESERVE UNIVERSITY

The Department of Physiology and Biophysics invites applications for tenure-track junior and senior positions. Candidates with strong credentials in membrane protein structure and function, electrophysiological and biophysical approaches are especially encouraged to apply; however, outstanding candidates in all areas of cell physiology and biophysics will be given serious consideration.

Terms are highly competitive and appointments provide excellent opportunities to develop strong, independent research programs in newly built state-of-the-art facilities in an expanding department and research community.

Submit curriculum vitae, brief statement of present and proposed research interest, representative reprints, and names of four references to: **Dr. Antonio Scarpa, Department of Physiology and Biophysics, Case Western Reserve University, 2109 Adelbert Road, Cleveland, OH 44106-4901.** *The university is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION. The Department of Neurobiology and Behavior, State University of New York (SUNY) at Stony Brook, is continuing its search for a candidate for a tenure-track, state-funded position in molecular neurobiology beginning as early as academic year 1991-92. The department, which currently consists of 16 members, is undergoing significant redevelopment, and has the resources to grow to 20 members within the next few years. The presently available position is at the **ASSISTANT PROFESSOR** level although an appointment at the rank of **ASSOCIATE PROFESSOR** could be considered. Rank and competitive salary will be commensurate with qualifications. All applicants should have a minimum of 2 years of postdoctoral experience. Candidates will be expected to develop a vigorous independent research program, and, as such, ample space and start-up funds will be provided. Applicants will also be expected to participate in undergraduate, graduate, and/or medical school instruction. Applicants should submit curriculum vitae, statement of research interests, and names and addresses of three references to: **Dr. Lorne Mendell, Chairman, Department of Neurobiology and Behavior, SUNY Stony Brook, Stony Brook, NY 11794-5230.** *SUNY Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer.* **AK 161.**

FACULTY POSITION, MEMBRANE BIOLOGIST. The Department of Biological Sciences at the University of South Carolina is seeking to fill a tenure-track faculty position in membrane biology. Emphasis is on modern molecular, genetic, and physical chemical approaches to studying the structure and function of cellular membranes and their roles in differentiation, cell-cell interactions, and signal transduction pathways. Faculty are expected to develop an active, extramurally funded research program, and to participate in the department's teaching activities. A wide range of biotechnological core facilities are available at the university, and add to a conducive and interactive research environment. Generous salary and start-up packages will be provided, commensurate with background and experience. The Search Committee will begin the screening process on 15 November 1990. Send updated curriculum vitae with a description of research plans and three letters of reference to: **Dr. Franklin G. Berger, Search Committee Chair, Department of Biological Sciences, University of South Carolina, Columbia, SC 29208.** *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

FACULTY POSITION ORGANISMAL/ECOLOGICAL PLANT PHYSIOLOGY CALIFORNIA STATE UNIVERSITY FULLERTON

The Department of Biological Science invites applications for a tenure-track position as **ASSISTANT OR ASSOCIATE PROFESSOR** beginning August 1991. Applicants must have a Ph.D. with a strong commitment to teaching and maintaining an active research program. Teaching responsibilities may include principles of botany, principles of ecology, organismal plant physiology, and upper division and master's level courses in the applicant's area of expertise.

The successful candidate will complement existing programs in terrestrial and/or aquatic botany. The opportunities include participation in equipping new teaching and research facilities to be available by the fall of 1993. A large greenhouse complex and a 26-acre on-campus arboretum are available for research and teaching; marine, freshwater, desert, chaparral, and conifer communities are within easy driving distance of the campus. The campus is located in close proximity to other major universities that offer a wide variety of facilities and possibilities for collaboration. The department is a member of Desert Studies and Ocean Studies Consortia that offer additional laboratory and field station facilities, including an 85-foot vessel for teaching and research.

Applicants should send a letter of application, curriculum vitae, copies of publications, statement of research and teaching interest and experience, documentation of high-quality teaching, and three letters of recommendation to: **Faculty Search Committee, Department of Biological Science, California State University, Fullerton, CA 92634-9480.** Deadline for receipt of applications is 15 January 1991, or until a suitable candidate is appointed.

Affirmative Action/Equal Opportunity Employer.

FACULTY POSITIONS IN CELL, MOLECULAR, AND STRUCTURAL BIOLOGY

Applications are invited for tenure-track positions in the newly formed Department of Cell, Molecular, and Structural Biology at Northwestern University Medical School. Positions are available at all levels from **ASSISTANT TO FULL PROFESSOR**. Applicants must have a Ph.D., M.D., or equivalent degree, with research experience in cell, molecular, or structural biology. Applicants will be screened with respect to their ability to carry on vigorous independent research and to participate in the various teaching programs administered by the department. Send complete curriculum vitae and a brief description of research interests to: **Dr. Robert D. Goldman, Chairman, Department of Cell, Molecular, and Structural Biology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611.**

Northwestern University is an Equal Opportunity/Affirmative Action Educator and Employer and invites applications from all qualified individuals. Applications from women and minorities are especially sought.

PARASITOLOGIST

An applicant is sought for a **FACULTY POSITION** in experimental parasitology for appointment fall semester, 1991. Research areas of interest include the molecular biology, biochemistry, cell biology, genetics, or immunology of helminths or protozoan parasites. Individuals in other areas of parasitology also are invited to apply. Rank and tenure are negotiable.

We seek an outstanding individual who will initiate and maintain a vigorous research program. Responsibilities include the direction of graduate students and teaching in parasitology.

We offer seed money, modern research space, a competitive salary, outstanding animal care facilities, ready access to major equipment such as staffed TEM, SEM, and a Biocore facility which houses macromolecular synthesizers, sequencers, NMR, FACS, etc. An NIH-funded Parasitology-Vector Biology Training Grant Program offers pre- and postdoctoral support. Submit curriculum vitae, three representative publications, names of three references, and a statement of teaching and research interests to: **Dr. Howard J. Saz, Department of Biological Sciences, University of Notre Dame, Notre Dame, IN 46556.** *Notre Dame is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

FACULTY POSITIONS. The New York University (NYU) Department of Biology is undergoing a major program of expansion and development. Three positions are presently available, in the areas of molecular aspects of development, genetics, and molecular evolution. Outstanding candidates in other areas will also be considered. Two appointments will be made at the **ASSISTANT PROFESSOR** level (tenure track); one may be made to a tenured position. Candidates will be expected to establish an active, externally funded research program and to participate in the department's teaching activities. Senior level appointments will be made to distinguished scientists with significant, funded research programs. Excellent start-up packages and newly renovated laboratory space are available. Application letter with curriculum vitae and names and addresses of three references should be sent to: **Chairman of the Search Committee, Department of Biology, New York University, Room 1009, Main Building, Washington Square, New York, NY 10003.** *NYU encourages applications from women and members of minority groups.*

FACULTY POSITION IN PLANT BIOCHEMISTRY AT WAKE FOREST UNIVERSITY

The Biology Department at Wake Forest University invites applications for a tenure-track position to be filled at the **ASSISTANT PROFESSOR** level. *We especially invite applications from minority candidates.* Required qualifications include a Ph.D. with training and experience in modern plant biochemistry. Preference will be given to candidates working in the areas of sensory biology, biochemical ecology, or cell and molecular biology. The successful candidate will be expected to develop courses which will include an introductory biochemistry course, a course in the candidate's specialty, and at times teach in the core curriculum. The candidate will be expected to establish a strong research program and participate in the training of master's and doctoral students. Submit curriculum vitae, a statement of career interests, and have three letters of recommendation sent to: **Dr. M. J. Jaffe, Chairman of the Developmental Genetics Search Committee, Biology Department, Wake Forest University, Winston-Salem, NC 27109.** *Wake Forest University is an Equal Opportunity Employer.*

FACULTY POSITION IN MOLECULAR GENETICS

ASSISTANT or ASSOCIATE PROFESSOR in the Department of Genetics, Harvard Medical School, to form and direct a new Molecular Genetics Unit, situated in the Mailman Research Center (MRC) of McLean Hospital.

The appointee will be expected to establish an independent research program in the molecular biology of vertebrate or invertebrate systems with relevance to neuroscience and to have an interest in interacting with existing neurobiology research programs at the center.

The MRC is a 45,000-square-foot facility entirely devoted to clinical and basic research in the neurosciences with laboratories for neuroanatomy, neurohistology, neurobiology, neuropathology, neurochemistry, molecular neurobiology, development neurobiology, neuropharmacology, neuroregeneration, molecular pharmacology, and experimental psychology. The center also has a federally funded Clinical Research Center and a brain bank.

Applicants should send their curriculum vitae, a statement of their research interests, and three letters of reference by 1 December 1990 to: **Bruce M. Cohen, M.D., Ph.D., Chairman, Molecular Genetics Search Committee, McLean Hospital, Mailman Research Center, 115 Mill Street, Belmont, MA 02178.** *McLean Hospital and Harvard Medical School are Equal Opportunity Employers.*

INSTRUCTOR, MICROBIOLOGY

Responsibilities are to carry out a research program to characterize mechanisms underlying antitumor immunity in experimental models and teach graduate and medical students. Ph.D. and/or M.D. required and at least 2 years of postdoctoral training. Expertise in cellular immunology, protein chemistry, and antitumor immunology. Submit curriculum vitae, description of research interests, and names of three references to: **J. Uhr, M.D., Department of Microbiology, University of Texas (UT) Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235-9048.** *UT Southwestern Medical Center is an Equal Employment Opportunity Institution.*

A very important organisation in drug
research has an opportunity in its research
centre in the Paris area :

BEHAVIOURAL RESEARCH SCIENTIST

The post will involve initiating and conducting experiments and writing associated reports: you will be responsible for a small group of technicians.

You will be joining a multi-disciplinary team within the neurobiology division. PhD-level qualifications are called for and some post-doctoral industrial experience is desirable ; a knowledge of "operant conditioning techniques" would also be an advantage.

Please send a hand-written letter, CV together with a list of published works noting content of particular relevance, under ref. 4117 to Media-System, 6 impasse des Deux Cousins, 75849 Paris Cedex 17.

MEDIA-SYSTEM

EXPERIMENTAL PATHOLOGIST

Position available in biomedical research laboratory for individual with doctoral (PhD, DVM/PhD or MD/PhD) in experimental pathology plus two years of experience in field to plan and conduct basic and applied research, both independent and collaborative, that will contribute to an understanding of the health consequences of airborne materials. Experimental pathologist will formulate research approaches and prepare research protocols; report results of research in the form of open literature publications and presentations at scientific meetings; train and supervise laboratory technicians in the preparation of tissue cultures from necropsies and animal surgeries; study animal tissue to provide data leading to an improved understanding of the mechanisms of respiratory tract carcinogenesis from inhaled materials; examine tissue under electron microscope and in flow cytometer to study normal biology of respiratory tract and its response to cancer-causing materials; and devise and direct the use of special stains and methods for isolating, identifying and studying function, morphology and pathology of obscure or difficult-to-identify cells, tissues and connecting fibers. Pathologist may conduct necropsies to select tissue specimens for study.

Position requires training and/or experience in ultrastructural studies of neoplasia with major emphasis on respiratory tract; demonstrated expertise in cellular alterations in the respiratory tract from inhaled mineral fibers and particles and other carcinogens; expertise in special techniques such as scanning and transmission electron microscopy, histochemistry and tissue culture; and ability to develop and adapt multiparameter flow cytometric techniques for study normal respiratory tract cell biology and effects of inhaled toxicants. Demonstrated ability to function as an independent researcher as evidenced by publications in the open literature is also required.

This is a full time 7:30 AM to 4:00 PM position (40 hours per week) with excellent fringe benefits and competitive salary (\$54,900 per annum). Equal Opportunity/Affirmative Action Employer. Applicants should submit resumes to New Mexico Department of Labor, 501 Mountain Road, N.E., Albuquerque, NM 87103, Job #334075.

HEALTH SCIENTIST ADMINISTRATION TRAINING

at the
National Institutes of Health
through the
Grants Associates Program

Scientists in biomedical or behavioral research interested in an administrative career with federal programs supporting research and training in health related fields may wish to consider the Grants Associates Program in the U.S. Public Health Service. This program is governed by the Grants Associates Board and is administered by the Office of Extramural Programs in the Office of the Director, National Institutes of Health.

The Program offers a limited number of full-time permanent positions per year on a highly selective basis, that prepare each associate for a leading role in health science administration. For a twelve-month period, Grants Associates participate in individually structured training experiences including on-the-job assignments, courses and seminars. The Program provides opportunities for participation in the development and administration of federally supported research programs, in the fundamentals of effective management, in the peer review process and in other related areas of health science administration. The Program also attempts to develop a sensitivity to the consequences of program decisions on other federal health programs, research institutions, and national health needs.

Admission to the Program is highly competitive for the five positions available. Motivation for a career in science administration, good interpersonal skills, and evidence of executive potential are important. If you are a U.S. citizen and hold a doctorate or equivalent in a discipline related to the biomedical or behavioral sciences, have significant independent research experience beyond the doctorate and are attracted to health science administration as a profession, you should inquire about the Grants Associates Program.

Grants Associates may be appointed either in the U.S. Civil Service with a salary range of \$35,825 to \$50,342 (General Schedule levels 12-14) depending on experience or in the Commissioned Corps of the U.S. Public Health Service at ranks beginning with senior grade (03 Lieutenant), salary dependent on prior military experience, but beginning at \$21,988.80 basic pay only.

The National Institutes of Health does not discriminate in employment on grounds of race, color, sex, national origin, age, handicap or religion.

For further information, write to:

**Director, Health Scientist
Administrator
Development Programs (S)
Office of Extramural Programs
Office of the Director
National Institutes of Health
Building 31, Room 5B-35
9000 Rockville Pike
Bethesda, Maryland 20892**



POSITIONS OPEN

FACULTY POSITIONS ASSISTANT/ASSOCIATE/FULL PROFESSOR DEPARTMENT OF BIOCHEMISTRY UNIVERSITY OF ILLINOIS COLLEGE OF MEDICINE

Applications and nominations are invited for tenure-track faculty positions for September 1991. We are seeking candidates who are using contemporary approaches to investigate problems in the general area of growth factor-signal transduction regulation of cell growth control and differentiation. Applicants should have a Ph.D., postdoctoral experience, a strong record of research accomplishments, and demonstrable potential for the development of an independent research program. At the tenured level, applicants must have a strong record of research accomplishment. The Department of Biochemistry consists of 20 full-time faculty and has hired several new faculty in the areas of gene expression and membrane biology in recent years. The department and college are well equipped and have research support facilities that include nucleic acid and protein synthesis and sequencing. Applications should include curriculum vitae, a summary of current and future research plans, and the names of at least three individuals for references. Application deadline is 31 December 1990. Send applications or nominations to: **Chairman, Faculty Search Committee, Department of Biochemistry (M/C 536), University of Illinois College of Medicine at Chicago, 1853 West Polk Street, Chicago, IL 60612.** *Affirmative Action/Equal Opportunity Employer.*

FACULTY POSITIONS, tenure track, Department of Biology, University of Puerto Rico. A department objective is the study of tropical biology. **BOTANY:** Two positions; one in plant systematics, the other preferably in one of the following fields: developmental biology, population genetics, or functional morphology. Teaching duties: general botany. **ANIMAL PHYSIOLOGY:** Teaching: undergraduate course in human physiology and anatomy. **ANIMAL PHYSIOLOGICAL ECOLOGY:** Search extended. Marine or terrestrial interests. Teaching: undergraduate ecology. **MOLECULAR GENETICS:** Biology background required. Teaching: undergraduate genetics.

All candidates will be expected to participate in the graduate program (M.S. and Ph.D.) and develop an active research program. Ph.D. required. Working knowledge of Spanish is advised. Applicants should submit curriculum vitae, statement of research and teaching interests, reprints, and have three letters of reference sent by 15 October 1990 (systematist, physiologist, physiological ecologist) or 5 November 1990 (botanist, molecular geneticist) to: **Dr. Ned Fetcher, Department of Biology, University of Puerto Rico, Rio Piedras, PR 00931.**

GENETICIST

Tenure-track position available beginning August 1991 for a geneticist. Faculty rank negotiable.

Ph.D. in genetics or Ph.D. in biological field with a specialization in genetics required. Candidates must demonstrate a commitment to teaching undergraduate students, a desire to involve undergraduates in scholarly activity, and a willingness to teach courses to nonmajors. *Minorities and women are especially encouraged to apply.*

Duties include teaching an undergraduate genetics course for majors and establishing an independent research program.

Salary and fringe benefits are excellent.

Send letter of application, long-term goals, curriculum vitae, transcripts, and three (3) letters of reference to:

**Chair, Search Committee
Biology Department
Slippery Rock University
Slippery Rock, PA 16057**

To ensure consideration, application materials should be received by 1 November 1990.

Slippery Rock University is an Affirmative Action/Equal Opportunity Employer.

DOCTORATES, any field considered. Mature attitude, excellent teaching ability, congenial personality, and professional presence necessary. We train you for intensive laboratory instruction of surgeons. Permanent instruction sites in Fort Worth, Los Angeles (Anaheim), or Seattle. Some travel required. Not a sales position. Beginning salary: \$40,000. Write for application information to: **Director, Midas Rex Institute, 2929 Race Street, Fort Worth, TX 76111.** New applicants only, please.

POSITIONS OPEN

HUMAN CHEMORECEPTION. The John B. Pierce Laboratory, devoted to research and education in health and the environment and affiliated with Yale University, seeks an **ASSISTANT FELLOW** (analogous to assistant professor) with experience in the human sense of smell and sensory irritation to join an ongoing research program. Applicants should have a doctoral degree in a relevant specialty. Experience in pharmacology/toxicology and biochemistry would be particularly desirable. Applicants should send curriculum vitae, a statement of research plans, representative publications, and the names of three references by 1 November 1990 to:

**Human Chemoreception Search Committee
The John B. Pierce Laboratory
290 Congress Avenue
New Haven, CT 06519-1403**

The John B. Pierce Laboratory is an Equal Opportunity/Affirmative Action Employer.

MASS SPECTROMETRIST (MS)

Immediate opening in neurochemistry group for an experienced mass spectrometrists, to become part of an active research team and be in charge of MS core laboratory facility. Research projects include retinal degeneration, cerebral ischemia-reperfusion damage, experimental epilepsy, mediators of inflammation, and neural cell signal transduction. The successful applicant will have a Ph.D. in organic or analytical chemistry and 1 to 3 years of experience with MS of biological metabolites, including arachidonic acid cascade, lipoxins, leukotrienes and platelet-activating factor. The successful applicant will be equally comfortable with other methods of instrumental analysis of trace metabolites, including but not limited to HPLC and GC/MS. Applications, including curriculum vitae, and names and addresses of three references should be sent to: **Mass Spectrometrists, c/o Nicolas G. Bazan, M.D., Ph.D., Louisiana State University (LSU) Eye Center and Neuroscience Center, 2020 Gravier Street, Suite B, New Orleans, LA 70112.** *LSUMC is an Affirmative Action/Equal Opportunity Employer.*

MOLECULAR VIROLOGIST. The Department of Virology and Immunology, Southwest Foundation for Biomedical Research, invites applications for an **ASSISTANT OR ASSOCIATE SCIENTIST**, faculty level position. Candidates should have a Ph.D., M.D., or D.V.M. with experience in DNA recombinant technologies associated with DNA or RNA viruses and will be expected to maintain an independent competitive research program. We are seeking individuals who will complement the existing AIDS programs focusing on both HIV and SIV nonhuman primate models. Opportunities exist for collaborations with five other scientists involved in AIDS research. These areas focus on viral pathogenesis, immunology, vaccines, and therapeutics. Other programs in this department focus on hepatitis viruses, herpes B virus, and their associated nonhuman primate models. The Southwest Foundation for Biomedical Research is a nonprofit, private research institution that supports 45 scientists. Other departments located at this facility include genetics, organic chemistry, physiology and medicine, and laboratory animal medicine. The foundation has extensive nonhuman primate resources which include baboons, chimpanzees, and macaques. Candidates should send curriculum vitae, brief summary of research goals, and the names and addresses of three references to: **Personnel Director (049), Southwest Foundation for Biomedical Research, P.O. Box 28147, San Antonio, TX 78228-0147.** *An Equal Opportunity Employer, M/F.*

PEDIATRICS AND HUMAN GENETICS UNIVERSITY OF MICHIGAN

The Departments of Human Genetics and Pediatrics are seeking a **FACULTY MEMBER** with interests in human and developmental genetics, a strong independent research program and Board-certified or -eligible in medical genetics. Send curriculum vitae, statement of research interests, and names of three references to: **Jerome L. Gorski, M.D., Departments of Pediatrics and Human Genetics, University of Michigan Medical School, 3570 MSRB II, Box 0688, Ann Arbor, MI 48109-0688.**

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

POSITIONS OPEN

PHYSICIST. Conduct research and development on plasma/radiation physics, using knowledge of hot electron/ion physics, theory and experimentation of r-ray and neutron detection/imaging, and research experience in high brightness electron beams, microwave/RF power systems, plasma diagnostics, and electronic techniques including CAMAC data acquisition system and digital data processing. Investigate gas dynamics and discharge processes in high power gas-discharge pumped CO₂ laser amplifiers, and nuclear radiation emanate from a multi-MeV ion accelerator. Design/test neutron/r-ray detectors and neutron moderators. Develop low emittance, high brightness negative ion sources for Ground Test Accelerator and Integrated Space Experiment. Solve research problems including high-power laser radiation propagation in atmosphere and development of reliable high-power microwave production. Forty hours per week; 9:00 a.m. to 5:00 p.m.; \$52,000 per year. Requirements: Ph.D. in physics and 1 year 6 months of experience in job offered or postdoctoral research experience in plasma/radiation physics. Mail two copies of résumé to: **JO #00910, Commonwealth of Massachusetts, Department of Employment and Training, Special Programs, First Floor, 19 Staniford Street, Boston, MA 02114.**

PUBLIC RELATIONS/MARKETING WRITER

Client has immediate opening for in-house writer to assist in developing information and materials for use in marketing inventions.

It would be desirable for the person selected to have a degree in the natural sciences, as would experience developing materials that concisely and correctly characterize new technologies and the opportunities these products, even in concept form, offer a business.

Work would include development of press releases, technical data sheets, sales letters, and marketing presentation pieces which review opportunities for specific technologies to targeted businesses.

Candidate must be willing to relocate to Tucson.

Send résumé, salary requirements, and five examples of your work to:

**The Peter Herrmann Company, Inc.
7522 East McDonald Drive
Scottsdale, AZ 85250**

A **POSTDOCTORAL POSITION** is immediately available to study the molecular biology of protooncogene regulation of mammalian genes. Experience in molecular biology and/or biochemistry is required. Salary commensurate with qualifications. Send curriculum vitae and the names of three references to: **Dr. Gregory Gick, Department of Biochemistry, State University of New York (SUNY) Health Science Center at Brooklyn, 450 Clarkson Avenue, Box 8, Brooklyn, NY 11203.** *Equal Opportunity/Affirmative Action Employer. DMC#CR0316.*

POSTDOCTORAL POSITION. Available to study regulation of gene expression in retinal glial cells [see *Mol. Cell. Biol.* 9, 4556; *DNA* 8, 437 (1989)]. Ongoing studies involve characterization of transcription factors and expression of growth factors in glial cells. Experience in recombinant DNA and protein purification techniques essential. Please send curriculum vitae and names of three references to: **Vijay Sarthy, Ph.D., Department of Ophthalmology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION. An NIH training grant position is available immediately for training in all aspects of in vivo metabolic NMR. *The training grant is only available for U.S. citizens or permanent residents.* Persons with a Ph.D. and/or M.D. are invited to apply. Please send curriculum vitae, relevant reprints, and three letters of reference to: **Dr. John S. Leigh, The University of Pennsylvania, D501 Richards Building, Philadelphia, PA 19104.** *An Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

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Call **SCIENCE** at 202-326-6555 for details.

KAROLINSKA INSTITUTET
DEPARTMENT OF MEDICAL NUTRITION

**THE BO AND VERA AX:SON JOHNSON'S
VISITING SCIENTIST FELLOWSHIP**

Postdoctoral Research Fellowship

The Bo and Vera Axson Johnson's Visiting Scientist Fellowship at the Karolinska Institutet for Research in Molecular Nutrition, is available at the Department of Medical Nutrition, Karolinska Institutet, located in the new and rapidly expanding NOVUM Research Park at Huddinge University Hospital in Stockholm, Sweden.

The Department of Medical Nutrition is a university department within the Karolinska Institute School of Medicine, forming a unit in the NOVUM Research Park with a staff of c.a 100 persons (scientists, students, technical and administrative staff). The main research areas include: steroid hormone receptors (structure, regulation), dioxin receptor, chemical hepatocarcinogenesis, molecular mechanisms of growth hormone, cytochrome P-450 and environmental factors of importance in the etiology of colon cancer.

The Department has a close collaboration with two other units within the NOVUM Research Park, i.e. The Center for Biotechnology, which has been in operation for five years and during this time has shown a dynamic development into a competitive, scientifically attractive and well equipped unit within the sphere of molecular biology, and the Center for Nutrition and Toxicology, which was recently founded and now has a well defined scientific profile within the spheres of nutrition and toxicology.

The Bo and Vera Axson Johnson's Visiting Scientist Fellowship is initially for one year with possibilities for extension up to three years. Preference is given to applicants with experience in molecular biology and/or protein purification. Adequate laboratory resources will be provided.

Applications should be sent to Prof. Jan-Åke Gustafsson, Dept. of Medical Nutrition, Huddinge University Hospital, NOVUM, S-141 86 HUD-DINGE, Sweden, together with CV, relevant publications and names of two referees.

U.S. DEPARTMENT OF ENERGY
OFFICE OF HEALTH AND ENVIRONMENTAL RESEARCH



Alexander Hollaender
DISTINGUISHED
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Information and applications:



Hollaender Postdoctoral Fellowships

Science/Engineering Education
Oak Ridge Associated Universities
P.O. Box 117
Oak Ridge, TN 37831-0117
(615) 576-4805

Deadline January 15, 1991



CANCER CENTER SCIENTIST

The Hippie Cancer Research Center invites applications for two **Cancer Center Scientists** in the areas of carcinogenesis, blood cell growth factors and cytokines. We are committed to recruiting and supporting independent investigators with substantial postdoctoral training who have demonstrated progressively responsible experience in the scientific prosecution of basic research in applying molecular biological techniques to the investigation of the nature of cancer and its intervention.

Successful candidates are expected to develop an independent, competitively funded, creative research program; to supervise associate scientists, direct graduate and postdoctoral students; and to interact on a variety of academic and community levels. Participation in relevant program projects (PO-1) is essential.

Significant research accomplishment documented by peer-reviewed publications and a demonstrated ability to obtain and productively deploy funding are essential. Excellent opportunities exist for research collaboration, and we offer competitive salaries and excellent benefit packages. Start-up funding is available.

An innovative research leader in the exploration of the molecular and genetic nature of cancer, the **Hippie Cancer Research Center** is a member of the Association of American Cancer Institutes. Affiliated with area hospitals and universities, the **Hippie Cancer Research Center** has four well-funded research divisions supported by NCI peer-reviewed grants and contracts.

Candidates should submit their curriculum vitae, recent relevant reprints, description of current and planned research goals, history of prior and current funding, and at least three references to:

Chairman, Search Committee
Hippie Cancer Research Center
4100 South Kettering Boulevard
Dayton, Ohio 45439-2092

An Equal Opportunity, Affirmative Action Employer, the Hippie Cancer Research Center offers a smoke-free environment.



**The Humane Society of the United States
announces
THE RUSSELL AND BURCH AWARD**

Beginning next year, The Humane Society of the United States (HSUS) will give an annual award to a researcher who makes an outstanding contribution toward the advancement of alternative methods in the area of animal research or testing. Alternatives are considered in the broad sense of the 3Rs — replacement (replacing *in vivo* vertebrate methods with other techniques), reduction (reducing the number of animal subjects, where feasible), and refinement (altering procedures so that animal subjects experience less pain or suffering).

The award is named in honor of scientists W.M. Russell and R.L. Burch, who first articulated the 3Rs approach. The award carries no monetary prize but will be a means of recognizing the important role that scientists themselves can play in reducing the research community's reliance and impact on animal subjects.

The HSUS is seeking nominations of suitable candidates. Self-nominations are encouraged. The ideal candidate is a researcher who: (1) has made an outstanding contribution toward developing or validating alternative methods in biomedical research or testing, (2) was motivated — at least in part — by humaneness and (3) whose animal research, past and present, is above reproach on humane grounds. A scientific advisory board will aid The HSUS in selecting the winning candidate.

Send recommendations by October 31st, to Martin Stephens, Ph.D., Director/Laboratory Animals, The HSUS, 2100 L Street, NW, Washington, DC 20037. Supporting documents such as relevant publications would facilitate evaluation.

Sr. Biologist/ Staff Scientist San Francisco/Bay Area

We're ALZA, a manufacturer of innovative drug delivery systems with a long-standing tradition of scientific and manufacturing excellence. We currently have an opening for an experienced and innovative Senior Biologist/Staff Scientist at our Palo Alto headquarters.

You will assist in developing, initiating and monitoring a toxicology program and report progress to the project team. Other responsibilities include helping prepare product registration documents, monitoring overall toxicology department compliance and maintaining pertinent records and files. You will also oversee animal facility operations, maintenance and documentation as well as supervise all phases of toxicology studies.

Requires an MS, PhD or equivalent in Pharmacology or related biological sciences and 3-5 years' experience. You must also possess strong communication skills, an innovative outlook and the ability to work well on a team.

For consideration, please call Darlene Markovich at (415) 494-5214; or fax your cv/resume to (415) 494-5151; or send it to: ALZA, Employment Department, 950 Page Mill Road, P.O. Box 10950, Palo Alto, CA 94303-0802. EOE.

alza

CELL BIOLOGIST

Glycomed is a young, rapidly growing pharmaceutical company in the San Francisco Bay Area. We are seeking a Scientist to help us uncover and develop novel drug compounds.

In this position, you will design and perform experiments investigating the interaction of a variety of cells with vascular endothelium. Candidates must have expertise in endothelial cell biology and experience in isolation and culture of vascular endothelium. PhD and at least 1 year of postdoctoral experience is also required. Experience with cell adhesion assays, carbohydrates and antibody binding would be helpful.

Glycomed offers a competitive compensation and benefits package. To apply, send letter and CV to: Glycomed, Inc., 860 Atlantic Ave., Alameda, CA 94501. EOE.



Glycomed

Repligen Corporation is a leader in the application of biotechnology to the healthcare market. We are currently developing an AIDS vaccine, AIDS therapeutic and diagnostic products, cancer therapies, and novel bioprocess reagents. We take pride in the high caliber of our scientific staff and our collaborations with major research institutions and corporate partners in Europe and the United States. The expansion of our effort has created the following opportunity:

Molecular Biology Principal Investigator

We have an opening for a senior member of our Molecular Biology staff to direct projects in retroviral vaccines and immunotherapies, and in the development of novel anti-cancer agents and biologicals. This scientist must have an exceptional record of scientific achievement including demonstrated project management and supervisory skills. The successful candidate will have 2-3 years' postdoctoral training plus at least 4 years' additional experience with skills not only in Molecular Biology (gene cloning, expression, synthesis and mutagenesis), but also a working knowledge of protein biochemistry, purification and cell biology. Experience investigating questions of protein structure-function relationships would be useful.

Repligen Corporation offers a competitive salary, excellent benefits, relocation, and equity participation. Please submit a cover letter, resume, and references to: B. Fleming, Repligen Corporation, One Kendall Square, #122, PO Box 9171, Cambridge, MA 02139. An Equal Opportunity Employer.

RepliGen

RECOMBINANT PROTEIN IN VIVO BIOLOGIST

Amgen, a leader in the development of hematopoietic and tissue repair growth factors for therapeutic use, has an immediate opening for an individual to conduct toxicological research studies of our recombinant proteins.

Candidates should have experience in working with protein therapeutics in *in vivo* models, and the desire to experimentally develop innovative models related to the target specificities of different growth factors and cytokines. Previous experience in hematopoiesis, tissue repair, angiogenesis, or transgenic mouse models would be helpful. Candidates should have a Ph.D., DVM or equivalent and relevant training in toxicology, pharmacology, physiology, pathology, developmental biology, or a related discipline.

Amgen offers a stimulating and challenging research environment on the leading edge of biotechnology. Our need for these positions reflects an ever increasing commitment to the development of significant products for human health care through excellence in research.

If you have the necessary skills and would like to be a part of an organization that places a high priority on its human resources, please send a complete CV, in confidence, to:

AMGEN, INC.
Recruitment, Dept. #558
Amgen Center
Thousand Oaks
CA 91320-1789

Equal
Opportunity
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AMGEN

Manager, Fermentation and Specialty Biologicals

The Merck Pharmaceutical Manufacturing Division, an industry leader in biological product development and production, has an exceptional opportunity for an experienced expert in fermentation biotechnology and downstream processing.

As Manager, Fermentation and Specialty Biologicals, the successful candidate will be responsible for advanced technology implementation and full-scale production of vaccines and protein products. Processes include fermentation and recombinant technology, covering a broad product line distributed worldwide.

The Manager's position is at a senior level, reporting to the Director, Biological Manufacturing. Budgetary responsibility is in excess of \$13 million, and the manager is directly responsible for a staff of approximately 25 exempt and 75 non-exempt technically trained employees.

A PhD in Biochemistry, Microbiology, or Virology is required, with a minimum of five (5) years' experience in fermentation and/or recombinant pharmaceutical production. At least 3 of the 5 years' experience must include: direct supervision of exempt and non-exempt technical personnel, responsibility for planning & controlling salary and operations' budgets, and responsibility for quality control conformance.

Merck Pharmaceutical Manufacturing Division's commitment to excellence means we recognize and reward outstanding performance. We offer a very competitive starting salary, a full range of benefits, and an opportunity to advance with one of the world's most highly respected corporations. Please send your resume with salary history/requirements to: **K.J. Hallee, Merck Pharmaceutical Manufacturing Division, West Point, PA 19486.** Equal Opportunity Employer M/F/H/V.



Merck & Co., Inc.

HYBRITECH INCORPORATED, a division of Fortune 100 Eli Lilly & Company, is a recognized leader in the application of monoclonal antibody technology to human health care needs. We manufacture diagnostic assays and we are also involved with the development of in vivo imaging products. We currently have the following needs:

DIRECTOR/DIAGNOSTIC PRODUCT DEVELOPMENT

We seek a Director to lead the product development efforts of our diagnostic R & D team. Our ideal candidate will have related immunoassay product development experience, specifically in cancer related products, and will be familiar with diseases of the central nervous system and cardiovascular system. This position requires a Ph.D. in Biochemistry or a related scientific discipline and successful experience working with other functional areas within an organization to bring projects to completion.

RESEARCH SCIENTISTS

Several excellent research opportunities are available for innovative scientists to join our immunodiagnostic product development team. We currently have needs for Ph.D Research Specialists who have knowledge/experience in the following areas:

- Cancer
- Molecular Biology
- Neurological Disease
- Cardiovascular Disease
- Assay Development

POSTDOCTORAL SCIENTISTS

We have two opportunities available for postdoctoral assignments:

THERAPEUTICS R & D: Project will include research on systems to clone immunoglobulin genes in bacteriophage systems. Will also modify immunoglobulin genes using site specific mutagenesis and screen for the production of altered proteins in a bacterial expression system. Knowledge of western blot technique/immunogenetics/molecular biology and expression of mammalian proteins in bacterial systems is desirable. Ideal candidate will have experience with bacterial expression, phage cloning, PCR technology, DNA sequencing and mutagenesis.

MEDICINAL CHEMISTRY: Project will be to perform experiments to elucidate the pharmacokinetic properties of a novel drug delivery system to include interpretation of the results in terms of classic pharmacokinetic models and in terms of a novel tumor physiology model. We seek familiarity with pharmacokinetic behavior of macromolecules and small molecules. Experience in quantitative extraction/analysis of drugs from animal tissue is desirable.

Hybritech offers competitive salaries/benefits and a stimulating research environment. For consideration please send your resume to:

HYBRITECH INCORPORATED
11095 Torreyana Road, Dept. HAUGH,
San Diego, CA 92121-1104



EOE

POSITIONS OPEN

POSTDOCTORAL POSITION. Available immediately to study the molecular basis for triacylglycerol recycling in mammalian cells. Prefer individual with experience in lipid biochemistry and/or molecular biology techniques. Send curriculum vitae and three names or letters of reference to: **Dr. Rosalind A. Coleman, P.O. Box 3028, Duke University Medical Center, Durham, NC 27710.**

POSTDOCTORAL POSITION. Available for Ph.D. with 1 to 2 years of postdoctoral experience in behavioral neuroscience. Individual should have experience working with rodent models of stress using behavioral, anatomical, and neurochemical methods. Active programs include: CRF modulation of behavior, neurochemical substrates of defensive responses, and models of anxiety and depression. Send curriculum vitae and names of references to: **Ned H. Kalin, M.D., Department of Psychiatry, B6/268, University of Wisconsin, 600 Highland Avenue, Madison, WI 53792. The University of Wisconsin is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS. Available for investigating the cellular and molecular biology of dopamine receptors. Cell biology projects include studying receptor-effector coupling mechanisms, G protein interactions, and mechanisms of receptor regulation in clonal cell lines. Molecular biology projects involve the cloning of novel receptor subtype cDNAs/genes, analysis and characterization of gene structure, and regulation of gene expression. Please send curriculum vitae and at least two letters of recommendation to: **Dr. David R. Sibley, National Institutes of Health, Building 10, Room 5C-108, 9000 Rockville Pike, Bethesda, MD 20892. An Equal Opportunity Employer.**

POSTDOCTORAL POSITION TO STUDY GENE REGULATION UNIVERSITY OF MICHIGAN

Postdoctoral position available to study the molecular biology and biochemistry of aging of human skin. Specific areas of interest include (i) transcriptional regulation, (ii) signal transduction, (iii) growth factors and cytokines, and (iv) retinoic acid receptors. Position offers a competitive salary and a stimulating work environment at a progressive, growing university medical center. Address applications, including fields of interest and curriculum vitae, to:

**John J. Voorhees, M.D.
Professor and Chairman
Department of Dermatology
1301 East Catherine
Kresge I, R6558
Ann Arbor, MI 48109-0528**

The University of Michigan is a nondiscriminatory Affirmative Action Employer.

POSTDOCTORAL POSITION ENDOCRINE TOXICOLOGY

Department of Pharmacology and Toxicology, Michigan State University. A Ph.D. scientist is needed to participate in research directed toward understanding the biochemical mechanisms by which certain chemicals inhibit the synthesis of insulin in animal and/or cellular systems. A strong background in biochemistry, pharmacology, or other disciplines in which molecular biology knowledge and experience have been gained is desirable. Measurement of mRNA levels by Northern analysis and other methods of investigation into the processes connected with synthesis of polypeptide hormones will be part of the research program. Funds are available for a 1- or 2-year commitment. Contact:

**Lawrence J. Fischer, Ph.D.
Institute for Environmental Toxicology
C-231 Holden Hall
Michigan State University
East Lansing, MI 48824
Telephone: 517-353-6469**

BONUS CIRCULATION FOR YOUR CLASSIFIED AD

Our issue of 16 November 1990 will be distributed to scientists attending the meeting of the American Society for Cell Biology (ASCB) in San Diego, California, 9 to 13 December 1990. Deadline for submission of line classified ads: 1 November 1990.

**SCIENCE Classified Advertising
Telephone: 202-326-6555
FAX: 202-682-0816**

POSITIONS OPEN

POSTDOCTORAL POSITION. Available immediately to study neuronal nicotinic receptors. Studies will focus on characterization of transiently expressed acetylcholine receptors in *cos* cells. Ph.D. and/or M.D. and experience in cell culturing is required. Experience in basic molecular biology techniques and/or patch clamping is desirable. Send curriculum vitae and names of three references to: **Dr. Barbara A. Dodson, Department of Anesthesia, Box 0648, or Dr. John Forsayeth, Department of Physiology, Box 0444, University of California, San Francisco, San Francisco, CA 94143.**

POSTDOCTORAL POSITIONS. In protein crystallography at Rockefeller University. Projects available include structure determinations of transcription factors involved in eukaryotic gene regulation and prokaryotic DNA-binding proteins involved in recombination. Candidates must demonstrate significant experience in protein expression and purification or in macromolecular crystallography. Send résumé to: **Dr. Stephen K. Burley, Laboratory of Molecular Biophysics, The Rockefeller University, Box 3, 1230 York Avenue, New York, NY 10021. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION. Albert Einstein College of Medicine. Available immediately to study the biochemistry and the molecular biology of genetic variants of human glycoproteins, the antigens of MNs blood group system. Candidates should have hands-on experience in standard techniques of molecular biology. Please send résumé and names of references to: **Dr. Olga O. Blumenfeld, Department of Biochemistry, Albert Einstein College of Medicine of Yeshiva University, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461-1602. The Albert Einstein College of Medicine of Yeshiva University is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL FELLOW

We are seeking a postdoctoral fellow to work on the molecular biology of human filarial parasites. The project will involve the isolation, sequencing, and expression of a collagen gene from the oculonodular parasite *Onchocerca volvulus*. Experience in and familiarity with recombinant DNA techniques is a must. The position is available immediately and is for a period of 2 years. Salary levels will be according to the guidelines established by the NIH. *Because of funding source, the applicant must be a citizen or permanent resident of the United States.* Please contact either: **Dr. T. V. Rajan or Dr. D. L. Greiner at The University of Connecticut Health Center, Farmington, CT 06030. Telephone: 203-679-2196 or -2389.**

POSTDOCTORAL FELLOWSHIP

A postdoctoral fellowship is available for up to 2 years starting June 1991. Applications are welcome in any facet of research related to marine biology and fisheries. The division currently has 23 faculty covering a wide range of interests including ocean remote sensing, recruitment processes, marine biotechnology, and ecology. Salary: \$30,000.

Apply by 1 December 1990 to:

**Dr. Peter Lutz, Chairman
Division of Marine Biology and Fisheries
Rosenstiel School of Marine and
Atmospheric Science
4600 Rickenbacker Causeway
Miami, FL 33149
Telephone: 303-361-4177**

POSTDOCTORAL RESEARCH FELLOW

An NIH-funded position is available immediately to study regulation of fibrinogen gene expression, assembly, and secretion. Applicants require a Ph.D. in biochemistry or molecular biology. Experience in recombinant DNA technology and tissue culture procedures is preferred. Send curriculum vitae and three letters of recommendations to: **Colvin M. Redman, Ph.D., Lindsley F. Kimball Research Institute, New York Blood Center, 310 East 67th Street, New York, NY 10021. Equal Opportunity Employer, M/F.**

**LINDSLEY F. KIMBALL
RESEARCH INSTITUTE
A division of the
New York Blood Center.**

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS IN NEUROBIOLOGY

Department of Anatomy and Neurobiology at Boston University has postdoctoral positions available for scientists interested in training in a program in structural aspects of neurobiology supported by the National Institute of Neurological Disorders and Stroke. All participating faculty have funded research programs, involving such approaches as electron microscopy, histochemistry, receptor binding, neuropharmacology, electrophysiology, cell culture, and behavioral testing in a variety of neuronal systems. *NIH regulations require U.S. citizens or permanent U.S. residents only.* For further information, contact: **Dr. Alan Peters, Chairman, Department of Anatomy and Neurobiology, Boston University School of Medicine, 80 East Concord Street, Boston, MA 02118. An Equal Opportunity Employer.**

SMITHSONIAN INSTITUTION FELLOWSHIP PROGRAM

GRADUATE STUDENT, PRE-, POST-, AND SENIOR POSTDOCTORAL FELLOWSHIPS in American history and material culture, anthropology, biological sciences, earth sciences, history of art, history of science and technology. Tenable in residence at the Smithsonian and its research facilities. Stipends and tenures vary. Deadline: 15 January annually. Contact: **Smithsonian Institution, Office of Fellowships and Grants, 955 L'Enfant Plaza, Suite 7300, Desk S, Washington, DC 20560. Telephone: 202-287-3271. Awards are based upon merit, without regard to race, color, religion, sex, national origin, age, or condition of handicap of applicant.**

THE JAQUA FELLOWSHIP IN SKELETAL METABOLISM JOHNS HOPKINS MEDICAL SCHOOL

The Bone Metabolism Research Laboratory studies heritable and acquired disorders of skeletal and connective tissues. Qualifications include a Ph.D. with experience in the molecular biology of collagen or skeletal matrix proteins. As stipulated by the foundation, this position is available to residents of, or those educated in, New Jersey. Applicants should submit their curriculum vitae to: **Jay R. Shapiro, M.D., Division of Geriatric Medicine, Johns Hopkins Medical School, Asthma Building, 301 Bayview Boulevard, Baltimore, MD 21224.**

RESEARCH INSTRUCTORS, POSTDOCTORAL FELLOWS, AND TECHNICIANS. Available immediately for well-funded new initiative. Genomic project involving novel tumor suppressor and its gene; nuclear structure/function, DNA repair, and cell cycle progression. Laboratory is located in pleasant Georgetown environment; considerable interaction with nearby NIH. Cloning experience required. *Applications from minorities are encouraged.* Salaries will be commensurate with experience. Contact: **Dr. Mark Smulson, Department of Biochemistry and Molecular Biology, Georgetown University School of Medicine, Washington, DC 20007. Telephone: 202-687-1718.**

POSTDOCTORAL/RESEARCH ASSOCIATE. Study on the toxins of *Clostridium difficile*. Experience in recombinant DNA technology, protein purification, and anaerobic bacteriology desired. Position closes 15 October 1990. Send curriculum vitae and three letters of recommendation to: **Dr. Tracy D. Wilkins, Department of Anaerobic Microbiology, Virginia Tech, Blacksburg, VA 24061-0305. Virginia Tech is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

POSTDOCTORAL/RESEARCH ASSOCIATE POSITION: MOLECULAR BIOLOGY OF THE NF1 GENE. Available to study mutations in the recently cloned neurofibromatosis gene and examining the effects of these mutations on the expression of the gene product in a variety of tissues. Applicants must have a Ph.D. or M.D. degree and have a strong background in molecular biology and molecular genetics. The position is funded for a minimum of 3 years and the starting salary is between \$25,000 to \$30,000 depending on experience. Please send curriculum vitae and names and addresses of three references to: **Dr. Stefan M. Pulst, University of California, Los Angeles, Cedars-Sinai Medical Center, 8700 Beverly Boulevard, Los Angeles, CA 90048. Telephone: 213-855-5166.**



Challenging Opportunities In Biomedical Research

Staff Fellowship Program DHHS/PHS/Food And Drug Administration Center For Biologics Evaluation And Research

The Center for Biologics Evaluation and Research is searching for outstanding candidates to conduct biomedical research in order to provide a strong scientific base for the regulation of biological products. Current research includes investigations in the areas of viral and bacterial diseases and vaccines, mechanisms of pathogenesis, cytokines and growth factors, allergy and immunology, parasitic diseases, and developmental biology. We have active research on AIDS and related diseases. This is a truly unique fellowship program which integrates diverse biomedical research efforts with an introduction to the scientific principles applicable to biologics development and control.

Qualifications: Candidates must have completed all requirements for a Medical or Doctor of Philosophy/Science Degree and must be either U.S. citizens or resident aliens eligible for citizenship within four years. Foreign medical school graduates must submit a copy of their permanent Educational Commission for Foreign Medical Graduates (ECFMG) certification.

Duration: Appointments are for an initial two-year period and may be extended up a total of seven years.

Location: Laboratories are strategically located on the campus of the National Institutes of Health in Bethesda, Maryland.

Salary: Salary range for candidates with a Doctor of Philosophy/Science Degree is from \$24,000 to \$46,861. Salary range for candidates with a Medical Degree is from \$28,000 to \$54,726. Salary, research support, and level of responsibility are commensurate with education and experience.

How To Apply: Candidates should send a current curriculum vitae and bibliography to:

FDA/Center for Biologics Evaluation and Research
Building 29, Room 104.A
8800 Rockville Pike
Bethesda, Maryland 20892

Applications are accepted throughout the year, and candidates should indicate when they will be available for employment. However, to receive full consideration under this announcement, applications must be received by Monday, January 14, 1991. For further information, call Ms. Boyer or Ms. Wilcox on (301) 496-5394 or 496-4357.

FDA Is An Equal Opportunity Employer

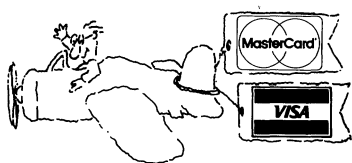
THE ROYAL SOCIETY

ROYAL SOCIETY RESEARCH PROFESSORSHIPS

The Royal Society invites applications for four Royal Society Research Professorships tenable from 1 October 1991 for research in the physical sciences (including mathematics, engineering and technology). Salaries will be well above the prevailing professorial minimum and include superannuation. Research professors may bid for annual research expenses of £13 500 or higher and for support for research or technical assistants, and there will be start-up grants of up to £35 000. Assistance will be given with removal expenses for successful applicants from overseas.

Appointments, which are tenable from 1 October 1991 and are open only to British citizens, are normally held at universities in the United Kingdom, and are for five years in the first instance. Details of tenure will be decided later but it is expected that one of the four vacancies will be renewable until retirement and the other three for one further five-year period after the initial five years.

Application details are available from Mrs U.M.A. Tokle, The Royal Society, 6 Carlton House Terrace, London SW1Y 5AG. (Fax 071-930 2170). The closing date for applications is 16 November 1990; no applications arriving after 4 p.m. on that date will be considered.



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POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE

Positions are available for recent Ph.D. graduates in biochemistry and molecular biology to work on mechanisms of gonadotropin, EGF, and eicosanoids action. Candidates with experience in the techniques of biochemistry and molecular biology such as subcellular fractionation and nuclear isolation, membrane protein and enzyme purification, measurement of enzymes activities, in vitro transcription, mRNA transport and translation, DNA and RNA isolation, and cloning, preparation and labeling of DNA and RNA probes, and hybridization, protein, RNA and DNA blotting are considered. If interested, contact: **Dr. Ch. V. Rao, Department of Obstetrics/Gynecology, 438 MDR Building, University of Louisville School of Medicine, Louisville, KY 40292, FAX: 502-588-0881, and arrange to send four recommendation letters.**

POSTDOCTORAL RESEARCHERS

The Department of Physiology, University of California, Irvine, is developing a postdoctoral candidate pool for possible openings during the remainder of the 1990-1991 fiscal year. Openings may be available in the following research areas: developmental neurobiology, ion channels in lipid bilayers, physical chemistry of membranes, mechanisms and regulation of steroid hormone biosynthesis, exercise physiology, molecular properties of ion channels in excitable cell membranes, and molecular and electrophysiological aspects of lymphocyte activation. Salary is in accordance with current NIH/NSF postdoctoral stipends which are based upon qualifications and years of prior, relevant postdoctoral experience. *Minorities and women are encouraged to apply.* Send curriculum vitae and names of three references to: **Scott E. Fraser, Chairman, Department of Physiology, University of California, Irvine, CA 92817.**

LANDSCAPE ECOLOGY, NUTRIENT CYCLING, BIOGEOCHEMISTRY, HYDROLOGY. POSTDOCTORAL RESEARCH ASSOCIATES AND GRADUATE RESEARCH ASSISTANTS. The Andrews Forest Ecosystem Research Group at Oregon State University invites applications for postdoctoral research on ecosystems of the Pacific Northwest. Two postdoctoral positions (research associate) are available immediately in: (i) landscape ecology: effects of forest disturbance on landscape structure, basin-scale hydrology, and stream processes; (ii) nutrient cycling: processes of decomposition, trace gas emission, organic matter turnover, and N transformations; (iii) biogeochemistry: integrating processes controlling soil solution chemistry; (iv) hydrology: vegetation-hydrology interactions. Work will emphasize modeling and GIS applications; opportunities for field and laboratory studies also exist. Ph.D. required. Full-time, fixed-term, 12-month positions. Salary: \$24,000 to \$30,000 depending on qualifications. For more information, contact: **Fred Swanson (503-750-7355; swanson@fsl.orst.edu)** or **Phillip Sollins (503-737-2244; sollins@fsl.orst.edu)**. Send letter of application, complete résumé, academic transcripts, and names of three references by 1 November 1990 to: **Dr. Logan Norris, Department of Forest Science, Oregon State University, Corvallis, OR 97331-5705.** Stipends are also available for graduate studies involving research related to the Andrews Ecosystem Program and leading to a Ph.D. or M.S. in forest science, soil science, botany, and other fields.

RESEARCH ASSISTANT. For university in southwestern Ohio. Administration of pharmacological agents and dietary manipulation of rats, spectrophotometric analysis of the membrane-bound photopigment rhodopsin in the rat eye, monoclonal antibody-based methods for protein analysis, isolation of ocular tissue membranes by density gradient centrifugation procedures, lipid analysis by gas liquid chromatography of fatty acid methyl esters and nanomolar phosphorus analysis. Job requires B.A. in pharmacy and 1½ years of experience as research assistant (pharmacy or biochemistry research). Knowledge of biochemistry of membranes evidenced by 4 months of work experience or one graduate level academic course. Evidence of published work as author or coauthor in the field of vision research. Forty hours per week; 9 a.m. to 5 p.m. Salary: \$18,000 per year. *Must have proof of legal authority to work permanently in United States.* Send résumé in duplicate (no calls) to: **J. Davies, JO# 1245094, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.** An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN



MOGAM BIOTECHNOLOGY RESEARCH INSTITUTE, KOREA SENIOR RESEARCH SCIENTISTS

Applications are invited from Korean scientists with a few years of postdoctoral experience in the field of molecular biology, molecular and cellular immunology, nucleic acid and protein chemistry, and molecular virology. It is expected that applicants will be able to work independently and be able to lead a research team.

MOGAM Biotechnology Research Institute is a non-profit organization established by the Korea Green Cross Corporation in 1984. The institute is located 15 miles south of Seoul and has excellent research facilities for modern research.

Please send applications, including curriculum vitae and the names and addresses of two referees, to: **Dr. H. M. Moon, AOL, Inc., Suite 403, 1055 Parsippany Boulevard, Parsippany, NJ 07054. Telephone: 201-402-5950. FAX: 201-402-5949.**

SENIOR SCIENTIST

Support R&D projects and conduct independent research plus develop proposals/documentation. Prefer Ph.D. in botany (or related) with experience in vegetation sampling/statistical analysis of plant communities. Familiarity with ELAS desired.

DATA ANALYST

Provide data analysis/support to scientists. B.S.C.S. with strong science minor, or B.S. in plant biology, forestry, marine biology (or related) is required (M.S. preferred). Experience in support of wetlands or estuarine ecosystems research and strong ELAS experience also needed.

Send your résumé to: **Lockheed Engineering and Sciences Company, Building 1103, Stennis Space Center, MS 39529.** Lockheed is an Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE. Available to participate in cardiovascular research by performing duties as: (i) cardiac and peripheral vascular surgery on large animals to initiate arterial thrombosis; (ii) monitor physiology, coagulation, and platelet functions; (iii) analyze results; write and present papers. Applicants must have ability to work independently in a team environment. Requirements: M.D. or Ph.D. or equivalent, 4 years of experience in cardiovascular research, and extensive knowledge of experimental models of arterial thrombosis. Salary: \$27,500 per year. Send résumé and references to: **Dr. Burt Adelman, P.O. Box 230, MCV Station, Richmond, VA 23298.**

ASSISTANT RESEARCH SCIENTISTS. Postdoctoral positions available in the laboratory of Dr. George W. Teebor, Department of Pathology, to join in purification and isolation of cDNAs of two mammalian DNA repair enzymes whose function we believe to be the maintenance of methylated cytosine residues in DNA [JBC 264, 13306 (1989)]. Antibodies against one of the enzymes are on hand to facilitate cloning. The purified enzymes will be used in the study of gene-specific repair and the cDNAs will be used to study their expression during development and tumorigenesis. Experience in protein biochemistry and molecular biologic techniques is desirable. Please send résumé and names of three references to: **Maha Singh, Personnel Department, New York University Medical Center, 550 First Avenue, New York, NY 10016.** Equal Opportunity Employer, M/F.

RESEARCH TECHNICIAN

Drosophila genetics laboratory is seeking a laboratory technician whose responsibilities will include maintenance of laboratory stock collection, mutagenesis screens, cytological work, and related experiments. Applicants should have experience in eukaryotic genetics work or be highly motivated to learn. B.S. degree in biological science or equivalent required, laboratory experience preferred.

Howard Hughes Medical Institute offers excellent salaries, a generous retirement plan, and flexible benefits, including health insurance. Please send curriculum vitae, salary requirements, and three references to: **Dr. Tulle Hazelrigg, Howard Hughes Medical Institute, Box T, University of Utah, 701 Wintrobe Building, Salt Lake City, UT 84132.**

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POSITIONS OPEN

ASSOCIATE RESEARCH SCIENTIST. Perform research in the measurement of passive scalars and velocity fields in turbulent and unsteady flows, using laser-induced fluorescence techniques and particle image velocimetry. Compute best basis functions for expanding turbulent fluctuations in one, two, and three dimensions. Identify and analyze vortex flow patterns. Develop velocimetry system to measure complete three-dimensional flow fields. Requires a Ph.D. in engineering or applied mechanics. No specific experience required. Requires detailed background in turbulent and unsteady flow measurements, optical information processing, computational fluid mechanics, and vorticity analysis as evidenced by specific research work or authored publications for professional journals in these disciplines. Monday to Friday, 9:00 a.m. to 5:00 p.m.; \$33,000.00 per annum. Please send résumé to: **Job Service Technical Unit, Connecticut Department of Labor, 200 Folly Brook Boulevard, Wethersfield, CT 06109.** Refer to: **Job Order Number 3076621.**

RESEARCH SCIENTIST/VIROLOGY

Kansas manufacturer of veterinary biologicals has position available for a research scientist/virology specializing in development of equine vaccines. Position requires a Ph.D. or Doctor of Veterinary Medicine degree with at least 2 years of experience in animal health industry. Requires 3 to 5 years of experience involving planning, scheduling, and execution of biological research projects; analysis and reporting of technical data; and experience in training and supervising support personnel. Incumbents at this level must have demonstrated at least five accomplishments such as development of new products, publications, or patents. Requires handling and performing tests upon small (laboratory) and large (farm) animals. Requires experience utilizing computers for data analysis as well as a working knowledge of statistics. Requires experience with cell culture including suspension culture, ELISA techniques, and electrophoresis.

Excellent company benefit package. Send résumé including salary history to:

**Mobay Animal Health Division
Human Resources Department
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Shawnee, KS 66201**

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SENIOR ORGANIC CHEMIST (BIOCHEMIST)

Job responsibilities include analyzing organic compounds for chemical and physical properties for product development and development of new organic compounds for use in molecular biology. Synthesis of nucleotide analogs and the design, synthesis, and purification of modified proteins and enzymes for use in nonradioactive nucleic acid detection. Application of nonradioactive detection methods to nucleic acid sequencing. Analysis and purification of proteins, nucleic acids, oligonucleotides, nucleotides, and nucleosides by high performance liquid chromatography. Evaluation of protein and nucleic acid purification and analytic methods, utilization of Maxam-Gilbert and dideoxy nucleic acid sequencing. Applicant should have knowledge and familiarity with basic techniques in organic synthesis, carbon-heteroatom bond formation, oxidation reduction reaction, protein modification with reporter molecules and protein handling experience, protein nucleic acid conjugation, nucleic acid purification through experience with HPLC, ion exchange reverse and normal phase chromatography and other forms of chromatography. Characterization, UV, spectroscopy, gel electrophoresis, wet method for protein and nucleic acid characterization. Also molecular biology techniques, gel electrophoresis, labeling of proteins and nucleic acid with radioisotopes autoradiograph and gel filtration chromatography. Education requirements: Ph.D. in chemistry or biochemistry or master's in chemistry or biochemistry with emphasis in organic chemistry and 3 years of experience including chemical modification and purification of proteins, enzymes, and nucleic acids as well as familiarity in techniques of molecular biology. Hours: 9:00 a.m. to 5:00 p.m., Monday to Friday; 40 hours per week. Salary: \$36,750 per year. Mail résumé and copy of ad to: **Department of Economic and Employment Development, 1100 North Eutaw Street, Room #212, Baltimore, MD 21201.** Job Order Number 8944995. Job location: Gaithersburg, Maryland.

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28 SEPTEMBER 1990

NCI FELLOWSHIP PROGRAM IN CLINICAL ONCOLOGY AND CANCER EPIDEMIOLOGY

The National Cancer Institute is accepting applications for a joint fellowship training program in clinical oncology and cancer epidemiology. Physicians with multidisciplinary training in clinical oncology, epidemiology, and etiologic research are becoming increasingly important in identifying cancer risk factors that may lead to further insights into human carcinogenesis and prevention strategies. This fellowship program offers such multidisciplinary training to physicians who have completed a minimum of two years in internal medicine or pediatrics.

The Clinical Oncology-Cancer Epidemiology Program is part of NIH's Clinical Associate Program, and offers three-year fellowships beginning July 1, 1991. The first year consists of clinical training in the Clinical Oncology Program, Division of Cancer Treatment. During this year, associates undertake the primary care of inpatients and outpatients entered into clinical trials and develop expertise in cancer diagnosis and treatment. Openings are available in the Medicine Branch, the NCI-Navy Medical Oncology Branch, and the Pediatric Branch.

During the second and third years, associates spend about 80% of their time in the Epidemiology and Biostatistics Program, Division of Cancer Etiology, and the remainder of their time in continued clinical activities in the Division of Cancer Treatment. In the epidemiology program, associates work under the direction of senior investigators in the Environmental Epidemiology Branch, the Clinical Epidemiology Branch, the Radiation Epidemiology Branch, and the Biostatistics Branch. All Branches are involved in research into environmental and host determinants of cancer. Opportunities for collaborative research may also be available in one of the intramural laboratories within the Institute.

This three-year fellowship is designed to fulfill the subspecialty requirements for Medical Oncology and Pediatric Hematology-Oncology. Candidates who have completed at least one year of clinical oncology training may be considered for direct entry into the second year of this program. Clinical Associates may enter the U.S. Public Health Service by means of the Civil Service or Commissioned Corps. For the Civil Service appointment, the starting salary is \$37,000, with annual increases of \$2,000 for each additional year in the program. Salaries for Commissioned Officers vary based on level of training and experience. Clinical Associates receive benefits that include health care, life insurance, vacation, and sick leave. In addition, moving and travel expenses are provided.

For further information and application procedures, please contact either:

**Gregory Curt, M.D.
Clinical Director
National Cancer Institute
Bldg. 10, Rm. 12N214
Bethesda, MD 20892
(301) 496-6375**

**Joseph F. Fraumeni, Jr., M.D.
Associate Director for
Epidemiology and Biostatistics
National Cancer Institute
Executive Plaza North, Rm. 543
Bethesda, MD 20892
(301) 496-1611**

Deadline for Applications: March 1, 1991



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ANNOUNCEMENTS

RESEARCH INQUIRIES INVITED

The Smokeless Tobacco Research Council, Inc., invites inquiries regarding grant applications.

The council sponsors independent research into questions of smokeless tobacco and health. Research support is through a program of grants-in-aid.

Grant applications are evaluated by the Scientific Advisory Board to the council and will be judged solely on the basis of scientific merit and relevance.

Deadlines for submission of grant applications are 31 December for 1 July funding and 30 June for 1 January funding. Address inquiries or requests for applications to: The Smokeless Tobacco Research Council, Inc., 420 Lexington Avenue, New York, NY 10170. Telephone: 212-697-3485.

1991 MARKEY FELLOWSHIPS

Applications are invited from Ph.D.'s in the biological and biomedical sciences for summer research fellowships at the Mount Desert Island (MDI) Biological Laboratory, internationally renowned facility for comparative physiology and marine biology. Applicants should have several years beyond completion of the doctorate and evidence of independent research. The fellowships, sponsored by the Lucille P. Markey Trust, are based on individual needs and can include salary as well as laboratory space, housing, funds for supplies, and travel. Applications may be obtained by calling the office at 207-288-3605 or writing to: MDI Biological Laboratory, Department LPM, P.O. Box 35, Salsbury Cove, ME 04672. Deadline for completed applications is 11 January 1991.

1991 PEW SUMMER FELLOWSHIPS FOR UNDERGRADUATE FACULTY AND STUDENTS

The Mount Desert Island (MDI) Biological Laboratory internationally renowned facility for comparative physiology and marine biology, and the Pew Charitable Trusts have established a summer program designed to enhance undergraduate education in the biological sciences. Fellowships are awarded in three categories:

- Faculty member with Ph.D. actively teaching biology at the undergraduate level.
- Undergraduate student with minimum of 1 year of both biology and chemistry.
- Faculty/student pair with same qualifications as above.

Awardees may work from 1 to 4 months at the MDI Biological Laboratory with senior scientists or, in the case of faculty or faculty/student pairs, may choose to work independently. Funding provides for housing, travel, research costs, and salary: maximum faculty award is \$14,000 with up to \$6,000 salary; maximum student award is \$6,900 with up to \$2,400 salary. Applications may be obtained by calling the office at 207-288-3605 or writing to: MDI Biological Laboratory, Department PCT, P.O. Box 35, Salsbury Cove, ME 04672. Deadlines for completed applications is 10 December 1990.

SITUATIONS WANTED

AQUATIC ECOLOGIST, Ph.D. (1991); 15 years of field and laboratory experience. Seeks coastal or freshwater research, United States or abroad; global environmental issues. Box 103, SCIENCE.

BIOCHEMIST with 20 years of experience in computer modeling and simulation of chemical and biological systems seeks research position or consulting. Box 114, SCIENCE.

BIOLOGIST/COMPUTER SCIENTIST, Ph.D. Experienced in image processing, pattern recognition, digital communication systems, gene databases, microbiology, CRAY Y-MP. Telephone: 619-944-6227.

CONSERVATION BIOLOGIST. Highly motivated, enterprising, published individual seeking a postdoctoral position in field/laboratory research. All areas are of interest. Scott R. Campbell, 16 East 36th Street, Reading, PA 19606. Telephone: 215-779-1511.

Well-funded Ph.D. professor doing research in **EXPERIMENTAL PATHOLOGY** seeks to relocate to Eastern university or industry. Box 104, SCIENCE.

SITUATIONS WANTED

FLOW CYTOMETRIST, Ph.D. Established scientist with numerous publications, broad experience including clinical. Seeks industry, clinical, or academic. Will consult part time. Box 105, SCIENCE.

IMMUNOLOGIST, Ph.D. Background in human tumor immunity, hybridomas, monoclonal antibodies, and cell culture. Seeking management position in biotechnology R&D. Box 26, SCIENCE.

MICROBIOLOGIST/MOLECULAR BIOLOGIST, Ph.D. DNA/RNA purification, electrophoresis, cDNA, PCR, radioactive/nonisotopic gene probes, cloning, protein purification, electrophoresis. Postdoctoral experience, publications. Box 106, SCIENCE, or 502-588-6773.

MOLECULAR BIOLOGIST, M.S. *E. coli* cloning, sequencing; DNA/RNA manipulations, mammalian cell culture. Seeking research position in northern California/Pacific Northwest. Box 107, SCIENCE.

MOLECULAR BIOLOGIST. Postdoctoral experience. Seeks career involving public communication of science. Publications, book author, professional graphics artist, public speaking. Box 108, SCIENCE.

PLANT BIOLOGIST, Ph.D. Tenured associate professor in comprehensive university seeks position in industry. Experience in tissue culture, recombinant DNA technology. Box 109, SCIENCE.

PLANT CELL BIOLOGIST, Ph.D. (1989). Teaching/postdoctoral experience. Broadly trained, seeks teaching/research position at liberal arts college in Northeast. Box 113, SCIENCE.

PLANT PHYSIOLOGIST/AGRONOMIST. Four years of postdoctoral experience, plant stress physiology; teaching experience. Seeks teaching/research: botany, plant physiology, agricultural science. Box 110, SCIENCE.

SCIENTIST, M.D./M.S. Five years of research experience in molecular biology, tissue culture, medical sciences. Seeks research, industrial, government, academic position. Box 111, SCIENCE.

Completing Ph.D. in **TOXICOLOGY**. B.A. in English. Excellent communication skills. Seeking regulatory/health assessment position. Prefer nonmetropolitan area. Box 112, SCIENCE.

MEETINGS

University of Southern California Comprehensive Cancer/AMGEN Symposium on

"GENE REGULATION IN DEVELOPMENT"

A symposium to be held at the University of Southern California (USC) Comprehensive Cancer Center, 2025 Zonal Avenue, Los Angeles, on Friday, 16 November 1990, sponsored by AMGEN. Speakers will be:

• **Bob Bosselman**, Ph.D., AMGEN, Newbury Park, California: "Gene Transfer into the Chicken."

• **Chi Nguyen-Huu**, Ph.D., Kenneth Norris Jr. Comprehensive Cancer Center/USC, Los Angeles: "Expression and Function of Homeobox Genes in Mouse Embryogenesis."

• **Irving L. Weissman**, M.D., Stanford University School of Medicine, Stanford: "Hematopoietic Stem Cells and Hematolymphoid Differentiation."

• **Mario R. Capecchi**, Ph.D., University of Utah, Salt Lake City: "Creating Mice with Specific Mutations through Gene Targeting."

• **Gerald Rubin**, Ph.D., University of California, Berkeley: "Cell-cell Communication and Development of the *Drosophila* Eye."

• **Frank Grosfeld**, Ph.D., National Institute for Medical Research, London, United Kingdom: "Regulation of the Human Globin Domain."

Admission is open to all and there is no charge for attendance. However, early registration is advised due to limited space. Please indicate your desire to attend by responding to: Josephine F. Lopez, Coordinator, Cancer Center Symposia, NOR 743, Kenneth Norris Jr. Comprehensive Cancer Center at USC, 1441 Eastlake Avenue, Los Angeles, CA 90033.

MEETINGS

WORKSHOP

ELECTRON CRYOMICROSCOPY AND 3-D IMAGE RECONSTRUCTION 8 TO 12 JANUARY 1991

Lectures and hands-on workshop in three-dimensional structure determination of viruses given by Dr. T. Baker, Dr. D. L. D. Caspar, Dr. R. A. Crowther, Dr. J. Dubochet, Dr. B. V. V. Prasad, and Dr. M. F. Schmid. For application, write to: Dr. W. Chiu, Baylor College of Medicine, Houston, TX 77030. FAX: 713-796-9438.

ENDOTHELIAL CELL INJURY, 5 to 6 November 1990, Eleanor N. Dana Center and Toledo Hilton Hotel, Toledo, Ohio, honoring the 25th Anniversary of the Medical College of Ohio and Benjamin F. Trump, M.D. Composed of four sections: Endothelial Cell Structure and Function, Mechanisms of Cellular Injury, Endothelial Response to Injury, and Therapeutic Approaches to Endothelial Injury. Speakers include Drs. Thomas Bocan, John A. Colwell, Ramzi Cotran, Peter Davies, Harold F. Dvorak, John L. Farber, Elaine Raines, John Thompson, Benjamin Trump, James Verani, John Wilks, and Bruce Zetter. Call the Office of CME, Medical College of Ohio, for further information, telephone: 419-381-4237.

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University of Maryland
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Sequence Analysis Review Publication

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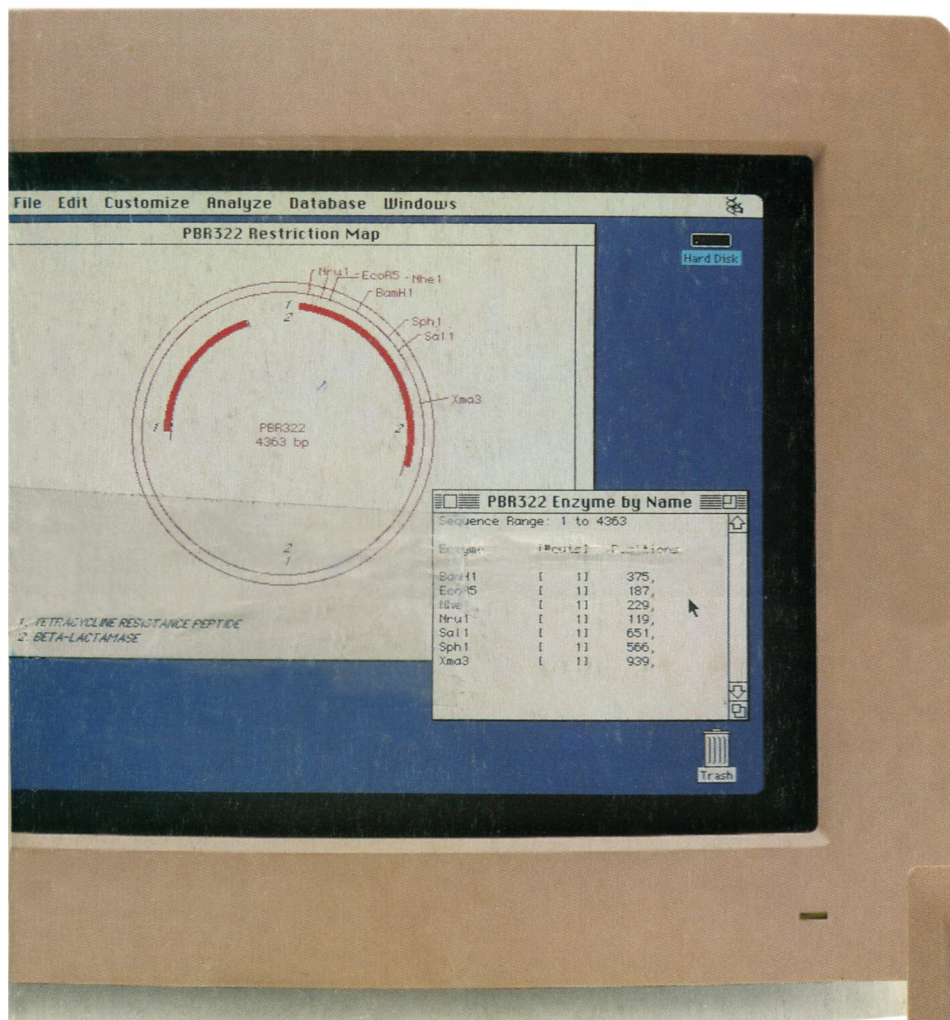
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