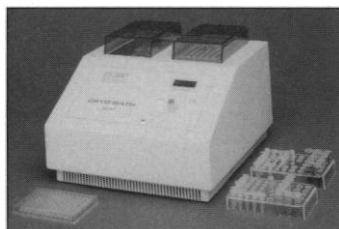


Cryo-Bath

The SCH1 Cryo-Bath is an electronically controlled incubation unit that can maintain any selected temperature from -5° to $+44^{\circ}\text{C}$. The SCH1's bath is 9 by 14 by 4 cm deep. It is cooled by Peltier refrigeration and heated by a conventional wire element heater. Temperature is controlled to within 0.1°C with a platinum



resistance sensor electronic controller and indicated on a digital display. The fully portable benchtop unit offers a choice of variable and preset temperature selections. All cooling elements are completely internal: There is no cumbersome cryocirculatory unit. Stuart Scientific. **Circle 79.**

Monoclonal Antibodies

A range of horseradish peroxidase-conjugated monoclonal antibodies (MAbs) to mouse and rat immunoglobulins is suitable for use in enzyme-linked immunosorbent assays, immunoblotting, and immunohistology. Serotec. **Circle 80.**

A panel of MAbs to bovine leucocyte antigens can be used in flow cytometry and immunocytochemistry. Serotec. **Circle 81.**

Data Analysis Software

Click-X data analysis software includes a feature called Scan-X, which is optical graph recognition (OGR) import software. Used with a compatible scanner, it provides the capability to import, convert, and consolidate data. Scan-X's OGR ability transforms pictures, graphs, screens, and multiplots directly into Click-X's files. The software can manage multiple graphs, export

text and files, access scientific graphics, graphically display research results, import data from spreadsheets, digitize graphs, smooth data, plot three-dimensional graphs, and more. The software requires an 80286-based IBM or IBM-compatible computer, 640K memory, graphic card, MS-DOS 3.3 or higher, Microsoft mouse or compatible, and a hard drive with 20 MB minimum. SoloSoft. **Circle 81.**

High-Volume DNA Purification Kits

The Elu-Quik Hi-Volume Plasmid Kit and the Hi-Volume Genomic Kit join the manufacturer's DNA Purification Kit. The kits exploit the affinity of DNA for glass in sodium perchlorate to purify large, intact DNA fragments using procedures designed to minimize shearing of the DNA. The plasmid kit can recover 50 to 180 mg of extremely pure plasmid DNA from 100 ml of bacterial culture in under 60 min, following the preparation of crude nucleic acid by the alkaline lysis procedure. The genomic kit can be used for recovery of more than 650 mg of genomic DNA from 10^8 cells within 90 min without ethanol precipitation. Toxic materials such as phenol and chloroform are avoided. Schleicher & Schuell. **Circle 82.**

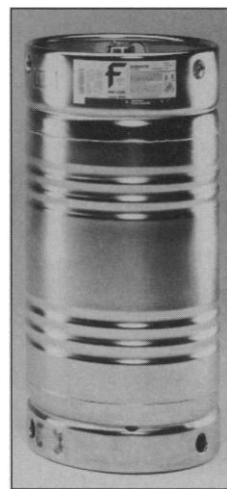
Mathematical Software

Maple V release 2 is a comprehensive mathematical software package for symbolic and numeric calculations on the leading UNIX platforms from Sun and Digital. Release 2 adds more than 700 new mathematical functions (including fast Fourier transforms), an improved user interface, typeset-quality output,

and enhanced two- and three-dimensional graphics. A similar upgraded program for Windows and other platforms will be released in early 1993. Waterloo Maple Software and MathSoft. **Circle 83.**

Solvents in Reusable Drums

Ten high-purity solvents are now available in stainless-steel reusable FishPak drums in a choice of 30-, 50-, 115-, and 200-liter sizes. The system offers the traditional purity of glass containers but at significant savings, according to the manufacturer. Disposing of a glass bottle, with its cardboard carton, Styrofoam insert, cap, and liner, costs approxi-



mately \$5. Moreover, a bottle should be rinsed three times. With FisherPak there is nothing to rinse and, hence, no labor costs or fees to landfills and hazardous waste sites. The large drums can also cut analytical costs by reducing the need for quality-control tests on solvents in different bottles. Currently available in high-performance liquid chromatography and ACS grades are: acetone, acetonitrile, *N,N*-dimethylformamide, hexane,

methanol, methylene chloride, methylene chloride stabilized, *N*-methylpyrrolidine, 2-propanol, and tetrahydrofuran. Fisher Scientific. **Circle 84.**

Physiological Data Recording on the IBM

AcqKnowledge for Windows waveform acquisition and analysis software for IBM and compatible personal computers works in conjunction with BIOPAC's MP100WS data acquisition hardware and Microsoft Windows 3.1. The MP100WS replaces traditional strip chart recorders, polygraphs, and tape-based data loggers. The MP100WS connects to the computer via a high-speed serial card. A line of signal conditioning amplifiers includes modules for brain activity, heart activity, muscle activity, eye movement, skin conductivity, photo plethysmography, respiration, and skin temperature. BIOPAC Systems. **Circle 85.**

Plasmid Artist for the Macintosh

Plasmid Artist version 1.2 for the Apple Macintosh can draw publication-quality plasmid maps, both linear and circular. Users can create restriction maps from imported sequences and the program's menu of over 80 restriction enzymes. The program is also useful for cloning fragments into vectors. Maps are automatically scaled and can be edited and resized. The program requires 1 MB of random access memory, with a hard disk and PostScript printer recommended. CLONTECH Laboratories. **Circle 86.**

Epitope Mapping System

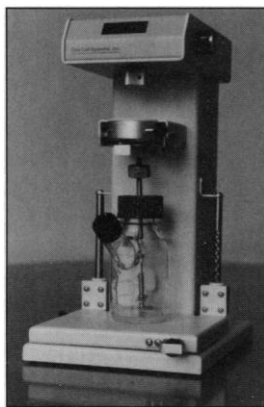
The NovaTope epitope mapping system permits rapid identification of epitopes and other ligand-binding domains of proteins by the creation of a library of bacterial

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.

clones, each of which expresses a small peptide derived from the protein under study. The system is composed of reagent kits for unbiased DNA cleavage, library construction, and screening. Monoclonal antibody epitopes can be defined within 10 to 20 amino acids within 2 weeks. Novagen. **Circle 87.**

Cell Encapsulation

The CellSys 100 is a sophisticated emulsifier designed to maximize cell encapsulation while preserving cell integrity. The instrument is based on gel microdrops (GMDs). GMDs are prepared by



dispersing a mixture of molten agarose and cells into an excess of oil to form an emulsion. As the emulsion cools, the drops gel. The GMDs are then physically distinct and can be handled like cells: they can be centrifuged, pipetted, and incubated. The CellSys 100 includes the GMD maker, an ice-water bath container, a sidearm flask, and an autoclavable stainless-steel shaft and blade assembly. Drops can range from 10 to 200 μ m diameter. The technology allows the user to separate and analyze cells based on function (for example, growth, drug susceptibility, protein secretion, enzyme activity, or metabolite production) or based on composition (for example, surface markers, internal proteins, or nucleic acid sequences). One Cell Systems. **Circle 88.**

Macintosh Graphics and Data Analysis

Version 4.0 of Data Desk is a program for exploratory data analysis and graphics on the Macintosh. This statistics program provides complete and consistent integration of dynamic graphics and modern data analysis methods. This new release works with an unlimited number of cases. Capabilities added include multivariate linear models, nonlinear smoothers, automated sliders, summaries by categories, and many more enhancements. Data Desk 4 requires 800 KB of disk space and 1 MB of random access memory. It runs on the full range of Macintosh computers, from PowerBooks to Quadras. Data Description Inc. **Circle 89.**

Palmtop Quality Control

QC Link/HP allows the user to collect quality control (QC) data directly on a Hewlett Packard HP 95LX palmtop computer from RS232 devices. The data can be directed to the onboard Lotus program or to a real-time QC charting program. QC Link/HP can produce X-bar, Y-bar, sigma, XY, and histogram plots. The user has full control over plot design and control limits; QC statistics are automatically calculated and displayed. Labtronics Inc. **Circle 90.**

Electron Microscope

The EM 912 OMEGA Energy Filter Transmission Electron Microscope is based on the technology used in the pioneering EM 910, with its dedicated multilayer management of all microscope functions and components, and features a newly developed electron-optical column with unprecedented imaging capabilities. The unit features an integrated imaging spectrometer of the OMEGA type, comprised of four magnetic prisms and a hexapole corrector located in the plane of symme-

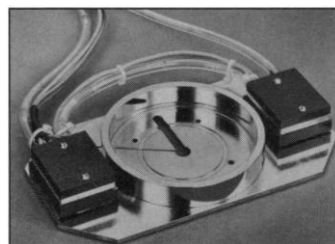
try, and operates at accelerating voltages of up to 120 kV. The entrance and exit planes are designed to be conjugate to the respective imaging and diffraction planes and to remain fixed for all magnifications and diffraction lengths. This relieves the user of any need to align the system. Carl Zeiss. **Circle 91.**

Sequence Analysis on the Macintosh

GeneWorks release 2.2 adds polymerase chain reaction (PCR) primer design functionality to this nucleic acid and protein sequence analysis software for the Apple Macintosh. GeneWorks now lets the user visualize and manipulate sequence data to find the best possible PCR primer. GeneWorks will evaluate primers it designs as well as those suggested by the user. The program also includes a new translated nucleic acid database search function. IntelliGenetics. **Circle 92.**

Thermal Stage for Petri Dishes

The TS-4LPD stage is designed to accommodate a large tissue culture dish and to maintain specimen temperature on a microscope stage between -20° and $+100^{\circ}\text{C}$. The collar on the stage



accommodates up to a 100-mm tissue culture dish. The stage can be used with most inverted microscopes. A hole in the stage permits the use of transmitted light. Temperature is adjusted with controls on the front panel and the digital display gives continuous readout of stage temperature. Physitemp Instruments. **Circle 93.**

Literature

The Sorcerer's Apprentice guide to Magic DNA purification systems contains protocols, tips, techniques, and troubleshooting for these quick and easy DNA purification systems. A reference table gives the performance parameters of each system. Promega Corp. **Circle 94.**

The Data Handbook: A Guide to Understanding the Organization and Visualization of Technical Data is a desktop reference for people who use computers to store and analyze their data. Spyglass. **Circle 95.**

The TRIO-2000: GC/MS and LC/MS in a Finer Form is a 16-page catalog on this single quadrupole mass spectrometer. Fisons Instruments. **Circle 96.**

112 UV/VIS Detector: A fixed-wavelength detector for analytical or preparative HPLC and LC describes this chromatography instrument. Gilson Medical Electronics. **Circle 97.**

How to Measure in Lab & Industry is a 74-page booklet that describes different types of data acquisition hardware for personal computers and explains which are best suited to different applications. Physitemp Instruments. **Circle 98.**

Cole-Parmer Instrument Company: 1993-1994 is a 1536-page catalog with more than 35,000 products covering instruments, equipment, and supplies. New products include analytical balances, compound microscopes, elemental analysis instruments, pH/ORP indicators and controllers, flow meters, microdispensers, and pumps and controllers. Cole-Parmer Instrument Co. **Circle 99.**

Scientific Data Analysis: Using LabVIEW and LabWindows is a 16-page brochure highlighting the more than 100 analysis functions of this instrumentation application software. National Instruments. **Circle 100.**

JOBS! JOBS! JOBS!

AAAS EMPLOYMENT EXCHANGE

If you are presently in the job market, a student anticipating graduation in 1993, or if you are an employer with positions to be filled, and wish to take advantage of our efforts on your behalf there's still time to enroll.

AAAS★93 Annual Meeting

HYNES CONVENTION CENTER, BALLROOM B

BOSTON — FEBRUARY 11-15, 1993

HOURS OF OPERATION

11 February 1993, Thursday

12:00 PM - 5:00 PMEmployer Registration and Interview Scheduling
2:00 PM - 7:00 PMCandidate Registration

12 February 1993, Friday

8:00 AM - 5:00 PMRegistration and Interview Scheduling
9:00 AM - 4:30 PMInterviews
9:00 AM - 10:15 AMSeminar: Interview/Presentation Skills
10:30 AM - 12:00 PMSeminar: Resume Writing
1:00 PM - 2:15 PMSeminar: Interview/Presentation Skills
2:30 PM - 4:00 PMSeminar: Resume Writing

13 February 1993, Saturday

8:00 AM - 6:00 PMRegistration and Interview Scheduling
9:00 AM - 5:30 PMInterviews
9:00 AM - 10:15 AMSeminar: Interview/Presentation Skills
10:30 AM - 12:00 PMSeminar: Resume Writing

14 February 1993, Sunday

8:00 AM - 6:00 PMRegistration and Interview Scheduling
9:00 AM - 5:30 PMInterviews

15 February 1993, Monday

9:00 AM - 1:00 PMInterviews

**Contact: Jacquelyn Roberts, AAAS Employment Exchange, 1333 H Street, NW, Washington, DC 20005;
Phone: 202-326-6737 before January 20, 1993. OR, you may enroll on-site at the meeting in Boston.**

Science

PERSONNEL PLACEMENT

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POSITIONS OPEN

CELL GROWTH REGULATION

Institute of Pathology
Case Western Reserve University (CWRU)

A tenure-track ASSISTANT or ASSOCIATE PROFESSORSHIP is available for research in cellular control of growth in normal and malignant cells, such as transcription control, cell cycle regulation, and intracellular signalling. Applicants (M.D. or Ph.D.) should be fully trained scientists with a history of productive laboratory investigation. Successful candidates will have newly constructed research space and interact with colleagues in immunology, transcription, and the molecular biology of cancer.

Send curriculum vitae, bibliography, names of three references and a summary of background and future research plans to: D. J. Templeton, Search Committee, Institute of Pathology, CWRU, 2085 Adelbert Road, Cleveland, OH 44106. CWRU is an Equal Opportunity/Affirmative Action Employer.

CHEMIST. Tenure-track ASSISTANT or ASSOCIATE PROFESSOR position available in the Department of Radiology, University of Pennsylvania. The successful applicant will be expected to join a strong research team in developing new imaging agents, specific emphasis will be conducting research in the development of new agents for *in vivo* magnetic resonance imaging and teaching at the graduate level. Candidates should have a Ph.D. in medicinal and/or organic chemistry, with working knowledge of MR imaging and pharmacology. Please send résumé to: Hank F. Kung, Ph.D., Department of Radiology, University of Pennsylvania, Room 305, 3700 Market Street, Philadelphia, PA 19104. The University of Pennsylvania is an Equal Opportunity Employer.

MAMMALIAN PHYSIOLOGICAL ECOLOGIST

We anticipate approval for a tenure-track ASSISTANT PROFESSOR position starting July 1993. Ph.D. required. Teaching and postdoctoral research experience desirable. The successful candidate will teach undergraduate courses at all levels including vertebrate zoology, ecology and animal physiology. In addition, there will be an expectation to participate periodically in introductory biology and the university-wide general education program. The appointee will join a biology faculty that is deeply committed to involving undergraduate students in research, and will contribute to this effort. Applications are especially encouraged from candidates in mammalian physiological ecology whose research is field-oriented. Please forward a letter of application with curriculum vitae, transcripts, a statement of teaching and research interests and representative publications by January 29, 1993 and arrange to have three letters of recommendation sent as quickly as possible to: Dr. Randall Fuller, Chair, Department of Biology, Colgate University, Hamilton, NY 13346-1398. Women and minorities are encouraged to apply.

Colgate University is an Equal Opportunity/Affirmative Action Employer.

DARTMOUTH COLLEGE ENVIRONMENTAL STUDIES PROGRAM CONSERVATION OF BIOLOGICAL RESOURCES

Dartmouth College invites applications for a tenure-track ASSISTANT PROFESSOR to begin fall 1993. We seek candidates studying the conservation of biological resources including such topics as: biodiversity and sustainable use of lands; ecological and environmental consequences of changing land use patterns; and conflicts between natural resource development and conservation. Strong quantitative skills or expertise in spatial analysis desirable. The successful candidate will be expected to establish a vigorous externally funded research program and to teach at the undergraduate and graduate levels.

Ph.D. in ecology, conservation biology, natural resource management, or geography. Postdoctoral experience strongly desired. Submit curriculum vitae, statement of research and teaching interests, representative reprints, and three letters of reference to: Environmental Studies Search Committee, Environmental Studies Program, Dartmouth College, 6182 Murdough Center-Room 324, Hanover, NH 03755-3560. FAX: (603) 646-1279. Review of applications will begin on February 1, 1993. Dartmouth College is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

BOTANIST/ECOLOGIST

VISITING ASSISTANT PROFESSOR. One-year appointment in Plant Biology and Ecology for 1993-94 academic year; may become tenure-track the following year. Teaching introductory biology, plant biology, and general ecology, and supervising greenhouse and associated facilities. Collaborative research with undergraduates is expected. The Ph.D. degree is required. Candidates with qualifications beyond Assistant Professor level will be considered. Send letter of application, curriculum vitae, transcripts and three letters of recommendation to: Dr. John Ward, Dean, Centre College, 600 West Walnut Street, Danville, KY 40422. Centre College is an Equal Opportunity Employer. Applications from women and minority groups are encouraged.

FACULTY POSITION. The Department of Biochemistry and Molecular Biology in the College of Medicine solicits applications for a state-funded, full-time (12-month) tenure-track position as ASSISTANT PROFESSOR. Applicants at other levels will be considered. Applicants should have a Ph.D. and/or M.D. degree, postdoctoral experience, and demonstrated excellence in research. The successful candidate will occupy laboratories in the new Arkansas Cancer Research Center. He/she will be expected to develop a funded research program **relatable to cancer**, and to contribute to teaching medical and graduate students. Applicants should submit curriculum vitae, a brief statement of proposed research, and the names and addresses of three references to: Charles G. Winter, Department of Biochemistry and Molecular Biology, Slot 516, College of Medicine, University of Arkansas for Medical Sciences, 4301 West Markham Street, Little Rock, AR 72205, by 15 February 1993. UAMS is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT or ASSOCIATE PROFESSOR: Neuropharmacology or Toxicology. The Department of Pharmacology, Toxicology and Therapeutics at the University of Kansas Medical Center invites applications for a tenure-track position at either the Assistant or Associate Professor level. The applicant must have a Ph.D. or M.D. degree, with two or more years of postdoctoral experience. The successful candidate will be expected to establish an independent research program in neuropharmacology, molecular neurosciences related to pharmacology or toxicology and contribute to the teaching of graduate and medical students. Affiliations with the Center for Environmental and Occupational Health and the Mental Retardation Research Center are possible. Curriculum vitae and the names of three references should be sent to: Dr. S. J. Enna, Department of Pharmacology, Toxicology and Therapeutics, University of Kansas Medical Center, Kansas City, KS 66160-7417. The University of Kansas is an Affirmative Action/Equal Opportunity Employer.

PLANT PHYSIOLOGIST/MOLECULAR BIOLOGIST. ASSISTANT PROFESSOR. Fall, 1993. Teach Plant Physiology, Plant Genetics, Basic Botany. Participation in teaching Radiation Biology and Basic Biology. Publish research in Plant Physiology or Molecular Biology. University teaching experience desired. Service and student advising expected. Qualifications: Ph.D. in a Biological Science or related field. For further information, contact: Search Committee, Biological Science Department, California State Polytechnic University, Pomona, CA 91768. Postmark March 1, 1993. Official confirmation of Ph.D. required of all finalists. *Right to work in the United States required; an Affirmative Action/Equal Employment Opportunity Employer.*

ASSISTANT PROFESSOR: Small liberal arts college emphasizing independent student research seeks broadly trained biologist to teach organismal biology, animal physiology, and upper division elective specialization, preferably neurobiology or related area. Must be conversant in cellular, molecular, and organismal biology to teach introductory course to biology majors. Tenure-track, start September 1993. Ph.D. and teaching experience required. Send curriculum vitae, statement of teaching philosophy, transcripts, and three letters of reference to: Dr. Bill Sype, Chair, Biology Search Committee, Albertson College of Idaho, Caldwell, ID 83605. Deadline February 1, 1993. Equal Opportunity Employer/Affirmative Action, women and minorities encouraged to apply.

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Stanford University

– New Faculty Awardees –

Eric N. Jacobsen

Associate Professor of Chemistry
University of Illinois, Champaign-Urbana

Andrew G. Myers

Associate Professor of Chemistry
California Institute of Technology

Scott D. Rychnovsky

Assistant Professor of Chemistry
University of Minnesota



POSITIONS OPEN

FACULTY POSITION IN MICROBIOLOGY, North Carolina State University. Applications are being accepted for a tenure-track, research and teaching position at the **ASSISTANT PROFESSOR** level. The desired candidate will have research experience with the genetics, molecular biology or physiology of the archaeobacteria and will develop an independent basic research program in that area. Opportunities exist for consultation and interaction with faculty in other departments having applied projects in bioremediation, resource, and waste management. Participation in the development of a new lecture-laboratory course and student advising will be the responsibility of the appointee. Applicants must possess a Ph.D. degree with at least two years of relevant postdoctoral experience. Applicants should send curriculum vitae, a statement of research interest, and names, addresses, telephone and FAX numbers of three persons who may be contacted as references to: **Dr. Eric Miller, Chairman, Microbiology Search Committee, Department of Microbiology, North Carolina State University, Box 7615, Raleigh, NC 27695-7615.** Closing date for the receipt of all materials is March 1, 1993. Incomplete or late applications will not be considered. Documentation of credentials and identity will be required before hiring. *North Carolina State University provides Equal Employment Opportunity without regard to race, religion, national origin, age or sex.*

The Department of Pathology at the Texas Tech University Health Sciences Center (TTUHSC) seeks a Ph.D. researcher for the position of **ASSISTANT PROFESSOR**, tenure-track, for participation in a developing program in cancer chemoprevention. Salary and compensation package will be commensurate with background and accomplishments of the successful applicant. Submit curriculum vitae, a statement of research interests, and a list of three references to: **Barbara C. Pence, Ph.D., Director of Research, Department of Pathology, Texas Tech University Health Sciences Center, Lubbock, TX 79430.** As an Affirmative Action/Equal Opportunity Employer, TTUHSC is especially interested in identifying women and minority candidates.

The Departments of Biology and Chemistry at Brooklyn College/CUNY, invite applications for three tenure-track positions (molecular biologist, biochemist, and analytical chemist) at the **ASSISTANT PROFESSOR** level beginning September, 1993. We seek scientists who can develop strong, independent, research programs which generate external funding and integrate with the new molecular biology/biotechnology program in the Applied Sciences Institute. Applicants must have a Ph.D. degree, postdoctoral training, publications, and a commitment to teaching at the undergraduate and graduate levels. Applications for the molecular biologist position should be directed to: **Dr. R. H. Gavin, Chairman, Department of Biology.** Applications for the biochemist and analytical chemist positions should be directed to: **Dr. Gary Mennitt, Chairman, Department of Chemistry.** Applicants should send curriculum vitae, statement of research plans, and three letters of recommendation (to be sent directly from three referees) by March 15, 1993 to the appropriate Department Chairman at: **Brooklyn College/CUNY, 2900 Bedford Avenue, Brooklyn, NY 11210.** An Affirmative Action/Equal Employment Opportunity Employer, M/F/H/V.

PHYCOLOGIST/BIOLOGIST

Ph.D. required. Tenure-track **ASSISTANT PROFESSOR** position. Duties include: teach phycoecology and non-majors biology or freshman botany; maintain an active research program in specialty. Must demonstrate ability and commitment to teaching. February 19, 1993 deadline for receipt of all application materials. August 23, 1993 starting date. An Equal Opportunity/Affirmative Action Employer. Send cover letter, résumé, 3 letters of recommendation, undergraduate and graduate transcripts to: **V. Thiesfeld, Chair, Department of Biology, University of Wisconsin-Stevens Point, Stevens Point, WI 54481. Telephone: (715) 346-2159, FAX: (715) 346-3624.** An alphabetical list of all nominees and applicants, without differentiation, may be released following the closing date.

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FAX NUMBER: 202-682-0816

POSITIONS OPEN

ASSISTANT PROFESSOR or ASSOCIATE PROFESSOR expert in cellular and molecular biology. Applicant should have independent program and cooperate with colleagues within and outside the department. Send curriculum vitae to: **Dr. Michael J. Mulroy, Department of Cellular Biology and Anatomy, Medical College of Georgia, Augusta, GA 30912-2000.** MCG IS AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER.

DEVELOPMENTAL BIOLOGIST

The Department of Biology at Drake University invites applications from individuals with the Ph.D. degree for a tenure-track **ASSISTANT PROFESSOR** position in developmental biology effective August, 1993. Teaching responsibilities will include developmental biology and anatomy. Applicants with teaching experience and research interests in developmental biology and/or anatomy are preferred. Experience with electron microscopy is desirable. The research program should invite participation by graduate (M.A.) and undergraduate (B.S.) students. Postdoctoral experience is desirable. The department expects excellence in both teaching and research. Applicants should submit a letter of application, curriculum vitae, statement of teaching area, research interests and goals, relevant reprints, and the names, addresses and telephone numbers of three references. Send application and supporting material to: **Dr. Dean A. Hoganson, Chair, Selection Committee, Department of Biology, Drake University, 2507 University Avenue, Des Moines, IA 50311-4505.** Drake University is an Equal Opportunity Employer.

TEACHING OVERSEAS

The Department of Biology at the American University of Beirut, Lebanon (AUB) invites applications for faculty positions at the level of Assistant Professor or above, available October 1, 1993. Candidates with specializations in the following fields are sought: Zoology and Comparative Vertebrate Anatomy, and Plant Taxonomy and Ecology. Applicants should hold the Ph.D. degree and are expected to teach undergraduate and graduate courses and to conduct a research program. Postdoctoral experience is preferred. Appointments are normally made for a three-year period. AUB is an Equal Opportunity/Affirmative Action Employer. Interested persons may send curriculum vitae and three letters of recommendation before April 15, 1993 to: **The Dean of Arts and Sciences, c/o New York Office of the American University of Beirut, 850 Third Avenue, New York, NY 10022, USA.** U.S. passports are presently invalid for travel to, in or through Lebanon, and for residence in Lebanon, by order of the Department of State, and therefore applications from individuals who would travel to or reside in Lebanon on a U.S. passport cannot at this time be considered.

UNIVERSITY OF SOUTHERN CALIFORNIA Tenure-track Faculty Position (Electrophysiologists, Molecular Biologists, Cell Biologists)

Applications are invited for an **ASSISTANT PROFESSOR** position in the Department of Pharmaceutical Sciences, School of Pharmacy. Outstanding candidates with research interests in **electrophysiology, molecular biology, or cell biology related to drug targeting** are invited to apply. Applicants must possess a Ph.D. degree in the biological, chemical, or pharmaceutical sciences. Participation in team teaching at both the undergraduate and graduate levels is required. Please submit curriculum vitae, selected reprints, a short statement of future research plan, and the names and addresses of three references by February 5, 1993 to: **Vincent H. L. Lee, Ph.D., University of Southern California, John Stauffer Pharmaceutical Sciences Center, 1985 Zonal Avenue, Los Angeles, CA 90033-1086, Telephone: (213) 342-3269.** Equal Opportunity Employer/M/F/H.

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POSITIONS OPEN

RESEARCH ASSISTANT PROFESSOR

We are searching for an individual with a Ph.D. in Neuroscience or one of its subdisciplines and substantial postdoctoral experience to fill a faculty position. This individual should be a cellular neurophysiologist with experience in synaptic and membrane physiology and biophysics. Candidates should be familiar with the use of in vitro slices and patch-clamp techniques for studying neurons in the mammalian CNS. A solid background in membrane biophysics is essential. We expect that this individual will participate in ongoing research projects focused on cortical development, neuronal responses to chronic injury, and models of epileptogenesis. *Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.* Candidates should send curriculum vitae, a brief statement of their research interests, and the names of three referees to: **David A. Prince, M.D., Department of Neurology and Neurological Sciences, SUMC, MO16, Stanford, CA 94305-5300.**

ASSISTANT PROFESSOR. Union College Department of Biology invites applications for a tenure-track position in **MOLECULAR/DEVELOPMENTAL GENETICS.** The successful candidate will be expected to teach in both core and upper-level courses in genetics and molecular biology, and to establish an active research program involving undergraduates. Union College is a small, selective, undergraduate institution with particular strength in science and engineering. The Biology Department has 14 full-time faculty and a strong commitment to teaching and research. A Ph.D. is required, and postdoctoral and teaching experience are desirable. Send your application and the names and addresses of three references by February 15, 1993 to: **Dr. Karen Williams, Department of Biological Sciences, Union College, Schenectady, NY 12308.** Union College is an Affirmative Action/Equal Opportunity Employer.

ASSOCIATE OR FULL PROFESSOR

Jefferson Medical College, Division of Pulmonary Medicine/Critical Care seeks accomplished investigator (M.D., Ph.D., or M.D./Ph.D.) to complement ongoing research in biochemistry and cell biology of airways inflammation and acute lung injury. In return for a significant institutional commitment, the applicant is expected to supervise a strong, extramurally funded research program and interact with other investigators in the institution. Investigators with expertise in the molecular biology of cytokines, signal transduction, regulation of gene expression, or molecular immunology are especially encouraged to apply, although a strong scientist in any complementary area will be considered. Opportunities for medical and graduate student teaching and patient care are available according to the applicant's training and desires. Applicants should send curriculum vitae and letter to: **James E. Fish, M.D., Director, Pulmonary Medicine and Critical Care, Jefferson Medical College, 804 College Building, 1025 Walnut Street, Philadelphia, PA 19107-5083. FAX: (215) 955-2318.** Equal Employment Opportunity College.

ASSISTANT/ASSOCIATE PROFESSOR, NEUROBIOLOGY COLUMBIA UNIVERSITY

Applications are invited for three tenure-track positions in the Center for Neurobiology and Behavior, at Columbia University, College of Physicians and Surgeons. Applicants must possess a Ph.D. or M.D. degree and have at least two years of postdoctoral training. Successful candidates will be expected to develop a vigorous, independent research program in one of three areas: (1) Computational neuroscience (theoretical or combined experimental/theoretical approaches); (2) Analysis of the molecular mechanisms of transmitter release; (3) Analysis of the function and control of transcription factors in the nervous system. Submit curriculum vitae, names and addresses of three references, and summary of research objectives, to: **Search Committee, Center for Neurobiology and Behavior, New York State Psychiatric Institute, 722 West 168th Street, New York, NY 10032.** An Equal Opportunity/Affirmative Action Employer.



4th International Conference on Anticarcinogenesis & Radiation Protection *Mechanisms, Biomarkers, Molecular Diagnostics and Preventive Strategies*

April 18-23, 1993

Inner Harbor, Baltimore, Maryland, USA

Conference Chairman: Thomas W. Kensler, Ph.D.; Co-Chairmen: Michael A. Trush, Ph.D. and Michael G. Simic, Ph.D.

KEYNOTE ADDRESS: I. Bernard Weinstein--Molecular mechanisms as a basis for cancer prevention

SESSION I:

Mechanisms of Cancer and Aging (T.W. Kensler and L.J. Marnett), J.A. Miller--Recent studies on the metabolic activation of chemical carcinogens, G.T. Bowden--Oncogene activation and tumor suppressor gene inactivation during multistage mouse skin carcinogenesis, L.J. Marnett--Stimulation and inhibition of oxidant formation in mouse skin *in vivo*, L.A. Loeb--Specific mutations caused by oxygen free radicals, S.R. Tannenbaum--Nitric oxide: cytotoxicity and mutagenicity to mammalian cells, T. Lindahl--Enzymatic repair of endogenous DNA damage, N. Holbrook--*GADD153*, a growth arrest and DNA damage inducible member of the CCAAT/enhancer-binding protein (C/EBP) gene family, E.R. Stadtman--Free radical mediated protein oxidation, K. Yagi--Lipid peroxides and aging

SESSION II:

Biomarkers & Susceptibility Factors (J.D. Groopman and M.P. Rosin), G.N. Wogan--Experimental validation of biomarkers for use in transitional epidemiological investigations, J.D. Groopman--Application of molecular dosimetry biomarkers to chemoprevention, S.S. Hecht--Biomarker studies on tobacco-specific nitrosamines, M.G. Simic--Biomarkers of oxidants *in vivo*, E. Moustacchi--Radiation effects on mutant frequency, M.P. Rosin--Human models for promotion, F.F. Kadlubar--Metabolic phenotypes and cancer susceptibility, B.S. Hulka--Biomarkers in transitional epidemiologic studies

SESSION III:

Molecular Diagnostics (C.C. Harris and P. Correa), P. Correa--Phenotypic and genotypic events in human gastric carcinogenesis, J.L. Bos--Role of ras mutations in human carcinogenesis, C.C. Harris--Mutational and functional analyses of p53 tumor suppressor gene in human carcinogenesis, D. Sidransky--Gene mutations in cancer diagnosis, P.A. Cerutti--Mutagenesis of H-ras protooncogene and p53 tumor suppressor gene in human cells, M. Schiffman--Molecular diagnostics of human cervical cancer and the effects of misclassification, K.H. Kraemer--Xeroderma pigmentosum: molecular markers and cancer prevention, L. Grossman--DNA repair proficiency and basal cell carcinoma: a molecular epidemiology study

SESSION IV:

Molecular Mechanisms of Chemoprevention (P. Talalay and L.W. Wattenberg), L.W. Wattenberg--Overview of basic chemopreventive strategies, A. Meister--Glutathione, ascorbate, and cell protection, P. Talalay--Role of enzyme induction in chemoprotection, T. Curran--Redox regulation of Fos and Jun,

C.S. Yang--Modulation of cytochrome P-450 activities by chemoprotective agents, R. Lotan--Retinoids as modulators of squamous cell carcinoma growth and differentiation, T. Nakayama--Suppression of hydroperoxide-induced cytotoxicity by polyphenols, S. de Flora--Chemoprevention of DNA adducts and chronic degenerative diseases by thiols, A. Kennedy--Potential mechanisms for the prevention of carcinogenesis by protease inhibitors

SESSION V:

Nutrition, Exercise and Cancer (B.D. Roebuck and C. Ip), A.T. Diplock--Antioxidant nutrients and cancer prevention, C. Ip--Potential of food modification in cancer prevention, H.J. Thompson--Exercise intensity and duration in the initiation of mammary carcinogenesis, B.D. Roebuck--Dietary modulation of pancreatic cancer: calories, lipids and exercise, M.J. Wargovich--Modulation of gastrointestinal cancer and biomarkers by chemopreventive agents

SESSION VI:

Roundtable Discussion--Strategies for Cancer Prevention: Diet, Foods, Additives, Supplements and Drugs (M.G. Simic)

SESSION VII:

Clinical Interventions (K.J. Helzlsouer and M.D. Abeloff), J.B. Mitchell--Potential use of nitroxides in radiation oncology, G.J. Kelloff--Progress in chemopreventive agent development, K.J. Helzlsouer--Serologic markers of cancer and their use in clinical trials, P.R. Taylor--Prevention of esophageal cancer: the nutrition intervention trials in Linxian China, W.K. Hong--Chemoprevention of aerodigestive epithelial cancer, A. Costa--Prospects of chemoprevention of human cancers with the synthetic retinoid fenretinide, G.S. Omenn--The β -carotene and retinol efficacy trial (CARET): a multicenter chemoprevention intervention in populations at high risk for lung cancer, smokers and asbestos-exposed workers, C.K. Redmond--Rationale and design of the NSABP breast cancer prevention trial

CONTRIBUTED PAPERS: platform and poster sessions

For further program information, contact:

Thomas W. Kensler, Ph.D. or Michael A. Trush, Ph.D.
Division of Toxicological Sciences, Room 7032
Johns Hopkins School of Hygiene & Public Health
615 N. Wolfe Street, Baltimore, Maryland 21205 USA
Telephone: (410) 955-4712; FAX: (410) 955-0116

For registration, CME or general information, contact:

Jacqueline Corn, D.A., 4-ICARP Secretariat
Telephone: (410) 955-2609; FAX: (410) 955-9334

This announcement sponsored courtesy of the Henkel Corporation

Molecular Biologist/ Biochemist

The PARKE-DAVIS Pharmaceutical Research Division of Warner-Lambert Company has an excellent opportunity available in the Immunopathology Department for a Molecular Biologist/Biochemist to participate in a research program directed toward developing novel therapeutic agents for arthritis. The focus of the research will be to study gene regulation of matrix metalloproteinases and TIMP in normal and arthritic conditions.

The candidate will be responsible for performing techniques such as extraction, purification and analysis of mRNA; synthesis and cloning of cDNA; isolation and characterization of proteoglycans and their degradation products; and enzyme assay analysis. Preference will be given to candidates who have experience in establishing and maintaining cell and organ cultures of cartilage, synovium and bone.

Qualified candidates should have a BS or MS degree in Molecular Biology/Biochemistry with at least 3 years of experience. Interested persons should send their CV and list of references to **Human Resources Department, Box JDM-92428, PARKE-DAVIS Research Division, Warner-Lambert Company, 2800 Plymouth Road, Ann Arbor, MI 48105. "Smoke Free Work Environment"**



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EXECUTIVE DIRECTOR AMERICAN INSTITUTE OF BIOLOGICAL SCIENCES

Position Description: The Executive Director of the American Institute of Biological Sciences is a full-time, senior level position, with administrative responsibilities for the Institute's Office in Washington, D.C.

American Institute of Biological Sciences: Founded in 1947 as a component of the National Academy of Sciences, the American Institute of Biological Sciences (AIBS) became an independent, non-profit organization in 1955. Today it is a member-governed, umbrella federation of 50 scientific societies, museums and research laboratories, representing more than 80,000 biologists, students and others concerned with the life sciences. These individuals represent the full range of biological disciplines and are employed in colleges, universities, museums, industry, laboratories and government.

The Mission of AIBS is to address pressing biological issues, especially understanding and preserving biological diversity, to serve as a national representative for biologists, and to enhance biological education, research and interaction among professional biological societies. AIBS is devoted to advancing the basic biological, agricultural, environmental, and medical sciences and their applications to human welfare. The Institute translates its goals into action through broad-based participation by members, elected officials, affiliate societies and consortium partners from other sciences, by providing joint meetings, comprehensive publications including *BioScience*, and a unified voice for biologists, all supported by a full-time professional staff housed in the National Center for the Life Sciences in Washington, D.C.

Responsibilities: The Executive Director has the administrative and financial responsibility for AIBS, including working with the Board of Directors to set policies and program priorities, to serve affiliate societies and members, to supervise a professional staff of approximately 35 persons, to lead AIBS programs such as the large Annual Meeting, the Special Science program and the publication of *BioScience*, to attract funding for special projects, and to serve as an articulate spokesperson and advocate for the biological sciences in Washington and nationwide.

Qualifications: Applicants should preferably have a Ph.D. degree in the biological sciences or closely related disciplines, at least ten years of professional experience in the biological sciences and considerable experience with the executive and legislative branches of the federal government, an appreciation for the research enterprise, and well-developed writing and speaking skills. In addition, applicants should be able to demonstrate innovative leadership of multidisciplinary organizations.

Applications: Applicants should submit a letter of intent, resume, and the names of five referees by February 10, 1993. Inquiries and applications should be addressed to **Paul G. Risser, President's Office, Roubidoux Hall, Miami University, Oxford, OH 45056**. AIBS is an Equal Opportunity/Affirmative Action employer.

POSITIONS OPEN

BIOLOGIST in Physiological Ecology. Tenure-track ASSISTANT PROFESSOR position to begin August, 1993. Teaching responsibilities in undergraduate Biology and Environmental Studies Programs and master's-level Environmental Biology Program include introductory biology and environmental studies, comparative physiology, toxicology, and additional courses in areas of expertise. Must have a Ph.D., take advantage of opportunities for collaboration with research laboratories in the Frederick-Washington-Baltimore region, and develop a student-oriented research program. Hood College, located in beautiful, historic Frederick, is consistently a top-rated comprehensive institution. Submit letter of application, curriculum vitae, and three letters of recommendation to: **Dr. John A. Commito, Co-chair, Department of Biology, Hood College, 401 Rosemont Avenue, Frederick, MD 21701-8575**, before February 1, 1993. *Hood College subscribes to the policy of hiring only U.S. citizens and lawfully authorized alien workers. We actively encourage applications from women and members of minority groups. Equal Opportunity Employer.*

ASSISTANT PROFESSOR, PHARMACOGNOSY (natural products chemistry, bio-organic chemistry). Ph.D. required in an area of discipline such as pharmaceutical science, natural product chemistry, biochemistry, or immunology. Postdoctoral training is required. Evidence of or potential for excellence in teaching and research is required. This is an academic year, tenure-track position effective September 1, 1993. Interested persons should submit curriculum vitae and the names of three references by February 26, 1993 to: **Yuzuru Shimizu, Search Committee Chair, (Log # 161048), UNIVERSITY OF RHODE ISLAND, P.O. Box G, Kingston, RI 02881. An Affirmative Action/Equal Opportunity Employer.**

ENTOMOLOGY. ASSISTANT PROFESSOR. Tenure-track, August 1993. We seek a Ph.D. committed to undergraduate teaching in general biology and entomology and active research. Primary duties are teaching general biology (including botanical topics), entomology, and supervising undergraduate research. Send application letter stating research and teaching interests, curriculum vitae, undergraduate and graduate transcripts, publications and 3 letters of recommendation to: **Entomology Search, Department of Biology, University of Wisconsin-Eau Claire, Eau Claire, WI 54702-4004**. Applicant screening begins February 15, 1993. *The University of Wisconsin-Eau Claire is an Affirmative Action/Equal Opportunity Employer. Applications from women and persons of color are particularly welcomed.*

ASSISTANT PROFESSOR. Small, church-related, liberal arts college seeks broadly trained biologist to teach courses in plant biology, cell/molecular biology, microbiology and general biology; will direct students in undergraduate research program. Excellent lab facilities. Send curriculum vitae, transcripts and three reference letters to: **Dr. Dale Goldsmith, Vice President for Academic Services, McPherson College, McPherson, KS 67460. Telephone: (316) 241-0731. Deadline is January 15, 1993, to assure full consideration. McPherson College is an Equal Opportunity/Affirmative Action Employer by choice.**

ASSISTANT/ASSOCIATE PROFESSOR CELL AND MOLECULAR BIOLOGY OF AGING

The Roy M. and Phyllis Gough Huffington Center on Aging is expanding its research programs and invites applications for faculty positions to complement its current activities. Candidates should have a Ph.D. or M.D., demonstrated ability to pursue independent research in Cell and Molecular Biology, and research interest in studies of the basic biology of aging process. Applicants for the Associate Professor position should have an established, nationally recognized research program in this area. The appointment will be tenure-track in an appropriate basic science department at **Baylor College of Medicine**. Applicants should send curriculum vitae, statement of research interests and names of three references by March 1, 1993 to: **Chairman, Cell and Molecular Biology of Aging Search Committee, Huffington Center on Aging, Baylor College of Medicine, One Baylor Plaza, M320, Houston, TX 77030-3498. Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer.**

POSITIONS OPEN

ASSISTANT PROFESSOR, BIOLOGY

The Biology Department of Gettysburg College invites applications for a one-year sabbatical replacement beginning in September, 1993. Teaching responsibilities will include one upper division course in Plant Taxonomy, one in the applicant's area of interest, participation in the first-year introductory biology course, and work with senior students on research projects. Candidates must have a Ph.D. in biology. Gettysburg College is rated as a highly selective liberal arts college and is located near the Washington/Baltimore area. *Gettysburg College is an Equal Opportunity, Affirmative Action Employer; women and minorities are encouraged to apply.* Submit curriculum vitae and the names and addresses of three referees, at least one of whom you can speak to the applicant's teaching effectiveness, to:

Dr. Ralph A. Sorensen, Chairman
Biology Department, Box 392
Gettysburg College
Gettysburg, PA 17325

The review of completed applications will begin February 15, 1993 and continue until the position is filled.

FACULTY POSITION IN BIOLOGICAL CHEMISTRY AT UHS/CHICAGO MEDICAL SCHOOL. PROFESSOR or ASSOCIATE PROFESSOR (tenure-track) appointment available for an experienced investigator in the area of protein structure/function. Preference given to mechanistic, mutagenesis, folding, spectroscopic, or other physical biochemical approaches. Systems of interest include receptors, growth factors, viral proteins, nucleic acid binding proteins, catalytic antibodies, etc. Candidates must have an established, independent, and viable research program with a proven record of accomplishment. The excellent research environment and modern facilities of the school are located in a pleasant North Shore suburb 30 miles north of the Loop. Send letter of application, curriculum vitae, names of references, and description of research to: Dr. K. E. Neet, Chairman, Department of Biological Chemistry, UHS/Chicago Medical School, 3333 Green Bay Road, North Chicago, IL 60064. *An Equal Opportunity/Affirmative Action Employer.*

ANATOMY FACULTY POSITION: Applications are invited for a full-time position at the level of **ASSISTANT or ASSOCIATE PROFESSOR**. Teaching responsibilities will be in Histology, Neuroanatomy and Gross Anatomy. Research opportunities are available. Send curriculum vitae and names of three references to: Chairman, Department of Anatomy, University of Osteopathic Medicine and Health Sciences, 3200 Grand Avenue, Des Moines, IA 50312. *The University is an Equal Opportunity Employer.*

ASSISTANT/ASSOCIATE PROFESSOR of Ophthalmology with a joint appointment in a basic science department at the Mount Sinai School of Medicine of the City of New York. We invite applications for an initial five-year appointment in a tenure-track position. The candidate must be an independent investigator from a basic biomedical science discipline who is willing and able to develop and apply cell biology/molecular biology techniques to experimental projects in *vision sciences research*. We will provide initial scientific support and collaboration with senior investigators who have established experimental eye research programs in the department. Generous start-up funds, yearly research support, and core facilities are available. Candidates should send curriculum vitae, a two-page summary of current research, and three names for possible references to: Oscar A. Candia, M.D., Box 1183, The Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. *An Equal Opportunity Employer.*

Biology Tenure-Track Position ASSISTANT PROFESSOR AQUATIC BIOLOGIST/GENERALIST—responsible for teaching advance courses in Estuarine and Coastal Biology, Freshwater Biology, Marine Biology. Required to teach intro courses for majors and non-majors. Experience in Anatomy and Physiology is a plus. Ph.D. is required, computer experience desirable. Send application, curriculum vitae, statement of teaching philosophy, summary of research goals and three letters of recommendation by January 31, 1993 to: Dr. William Tramontano, Chair, Department of Biology, Manhattan College/College of Mt. St. Vincent, Riverdale, NY 10471-1093. *Women and minorities are encouraged to apply. Equal Opportunity Employer/M/F/Affirmative Action.*



A TIME FOR ACHIEVEMENT

Glaxo Inc., one of the largest pharmaceutical companies in the world, has an established record of developing the highest quality prescription medicines for unmet patient needs. Located in Research Triangle Park, NC, the Glaxo Inc. Research Institute is a premier facility which provides a stimulating environment for scientists working in all aspects of discovery and development.

The following 3 openings are available within our **DEPARTMENT OF MOLECULAR BIOLOGY**. This Department is expanding its section for mammalian cell targets and is seeking individuals possessing expertise in cloning and expression.

SECTION HEAD

The selected individual will be responsible for building the section, proposing new areas of opportunity for research and for establishing collaborations with existing project teams.

Background should include a Ph.D. in Molecular Biology or related field, with 5-10 years relevant experience. This is a senior position requiring an individual with demonstrated ability in conducting independent research.

Please refer to position title and Job # 9127B150-SC on all resumes.

SENIOR SCIENTIST

Selected candidate should possess a Ph.D. in Molecular Biology or related field, as well as postdoctoral experience. The individual we seek must possess the potential for scientific leadership and demonstrated expertise in techniques of cloning and expression.

Please refer to position title and Job # 9127B151-SC on all resumes.

ASSOCIATE SCIENTIST

The selected candidate should possess a BS or MS in Molecular Biology or related field, and 2-5 years of relevant research experience. Previous experience in generating and maintaining stably transfected cell lines a plus.

Please refer to position title and Job # 9127B148-SC on all resumes.

In addition to these openings, we have the following position available within our growing **DEPARTMENT OF CELL PHYSIOLOGY and BIOPHYSICS**.

SENIOR SCIENTIST

The selected individual will study the importance of intracellular ion modulation in various non-excitabile cell types.

Background must include a Ph.D. in Physiology, or a related discipline, and postdoctoral experience related to ion channel or intracellular fluorescence techniques. Familiarity with epithelial, bone or white blood cell physiology would be an advantage.

Please refer to position title and Job # 9115B107-SC on all resumes.

Join Glaxo and enjoy excellent salaries, flexible benefits, an on-site fitness center, a spirit of enthusiasm and teamwork, and outstanding opportunities for career satisfaction. Equally appealing is our world famous scientific, industrial, and academic community in Research Triangle Park, NC. Send your resume, which must include position title and salary history, to: **Human Resources Department, Glaxo Inc., P.O. Box 13398, Research Triangle Park, NC 27709.** (No Phone Calls or Agency Referrals, Please.) *An Equal Opportunity Employer M/F/D/V.*

Glaxo Inc.

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Research Associates Receptor Biology

Our research is focused on the identification and characterization of new growth factors. Experimental approaches are multifaceted and include analyses of nucleic acids, proteins, and cellular responses. ■ You must possess a BS/MS in molecular biology, cell biology, or related field, coupled with a minimum of 2-3 years' experience. Additionally, you should be familiar with standard molecular biology techniques which includes PCR, Northern, Southern, Western analyses and DNA library screening. Training in tissue culture is desirable. Highly motivated individuals seeking independence are encouraged to apply.

At Amgen, we invest our employees with the freedom to manage their affairs, regulate the quality of work, and make decisions within company goals. And we back this freedom with meaningful challenge and responsibility, as well as a compensation and benefits package that reflects the level of our commitment. ■ Interested candidates should submit their resumes, in confidence, to: **Amgen, Inc., Staffing Dept. Job Code S510, MS 10-1-A-411 Amgen Center, Thousand Oaks, CA 91320-1789.** Equal Opportunity Employer M/F/D/V.

AMGEN®

MEDICAL ONCOLOGY FACULTY POSITION

UNIVERSITY OF ROCHESTER CANCER CENTER

The Medical Oncology Division of the University of Rochester Cancer Center and the Department of Medicine of the University Medical Center (Strong Memorial Hospital) are seeking applicants for a position at the Assistant or Associate Professor level. Applicants must be board certified/board eligible in Internal Medicine, board certified/board eligible in Medical Oncology and have had some experience in the conduct of clinical trials and/or basic science in oncology research. The successful candidate will interact with the basic and clinical scientists, have access to and support a variety of shared resources within the Cancer Center, and will be encouraged to conduct either clinical or laboratory programs with independent funding within a reasonable time after appointment.

Direct patient care responsibilities will not exceed 20% time and effort.

The University of Rochester Cancer Center is a Designated National Cancer Institute supported center with a large clinical and basic science faculty. The Medical Oncology Division emphasizes clinical trial research (intramural and extramural via the Eastern Cooperative Oncology Group) in a setting of maximum support from nursing, pharmacy and social work services. The position will be filled by July 1, 1993. Applicants should send their c.v. and three letters of recommendation to:

John M. Bennett, M.D.
Head, Medical Oncology Unit
University of Rochester Cancer Center
601 Elmwood Avenue, P.O. Box 704
Rochester, NY 14642

Water Quality

Senior Microbiologist (Limnologist) \$4,752 - \$5,906/mo.

MWD, one of the world's largest water agencies, seeks an experienced limnologist. This is a working supervisor position to provide field support for water quality monitoring throughout Metropolitan's system and conduct basic and applied research on taste and odor control, storm water runoff, water quality and aquatic weed control. Advanced open water diving certification is desired. Demonstrated experience required with design and execution of limnological field studies including statistical analysis, report writing, and oral presentation. M.S. in limnology related Aquatic Sciences desired with at least two years' management or supervisory experience. Position location: City of La Verne. Limited relocation assistance available.

To request an application, call 1-800-540-6311 (in CA) or (213) 250-6453 and refer to Job Code 92-215 JB. Resumes cannot be substituted for a completed application. Open only until sufficient applications are received. MWD supports the principles of equal opportunity and affirmative action. Women, minorities, veterans and the disabled are encouraged to apply.



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**THE NATIONAL
RESEARCH
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announces

Resident Research Associateships Awards to be offered in the fields of **Plant/Microbe Interactions** and **Transgenic Plants** at the **EPA Environmental Research Laboratory** Corvallis, Oregon

The National Research Council (NRC) is accepting applications for three award competitions in 1993 for Postdoctoral and Senior Research Associateships at the Environmental Protection Agency's Environmental Research Laboratory (ERL) in Corvallis, Oregon.

PLANT/MICROBE INTERACTIONS Opportunity for plant/soil ecologist to identify factors that will enhance soil remediation and the establishment of desired plant communities in soils that have been impacted by chemical or oil spills, or mining, agricultural, military or industrial practices.

TRANSGENIC PLANTS Opportunity for soil/invertebrate ecologist to evaluate ecological effects of plants engineered for insect, disease or herbicide resistance or for the production of specialty compounds or environmental clean up, on soil microbes and invertebrates.

Each NRC awardee will work in one of the above project areas as a guest investigator at ERL, Corvallis. Annual stipend for recent Ph.D. recipients is \$35,000 and is appropriately higher for senior researchers. Each award is for one year renewable to a maximum of three. Support is provided for relocation and limited professional travel, and a comprehensive health insurance program is offered.

FOR FURTHER INFORMATION CONTACT: Dr. Lidia S. Watrud

USEPA Environmental Research Laboratory

200 S.W. 35th Street
Corvallis, OR 97333
Tel: (503) 754-4874



Applications, submitted directly to the NRC, are accepted on a continuous basis throughout the year. Those postmarked by: January 15 will be reviewed in February; by April 15, in June; and by August 15, in October.

FOR APPLICATION MATERIALS

CONTACT: The Associateship Programs (GR430/CS), National Research Council 2101 Constitution Avenue Washington, DC 20418 Fax: (202) 334-2759

**POSTDOCTORAL FELLOWSHIPS
IN MOLECULAR CARDBIOBIOLOGY
YALE UNIVERSITY SCHOOL OF MEDICINE**

Postdoctoral fellowship positions are available in the laboratories of several investigators in the interdepartmental Molecular Cardiology program at Yale's Boyer Center for Molecular Medicine. Areas of interest include:

- **Jeffrey R. Bender:** Molecular mechanisms of cell adhesion, immune recognition of endothelium and endothelial cell activation.
- **Henrik G. Dohlman:** Molecular genetics of G protein signaling and desensitization.
- **Steve A. N. Goldstein:** The structure and function of ion channel proteins. The laboratory explores mechanisms of K⁺ channel function using site-directed mutagenesis, biochemistry and whole-cell, patch and bilayer recording methods.
- **Vincent T. Marchesi:** Angiogenesis, non-neoplastic proliferation of vascular tissue, biochemistry of mitosis.
- **Jordan S. Pober:** Cytokine regulation of endothelial gene expression; T cell activation by endothelium.
- **William C. Sessa:** Biochemistry and molecular biology of nitric oxide generation by endothelial cells.

Candidates should forward their curriculum vitae, reprints, and three letters of reference by March 15, 1993 to any of the above investigators c/o Ms. MaryLou Perez, Yale University School of Medicine, Boyer Center for Molecular Medicine, 295 Congress Avenue, P.O. Box 9812, New Haven, CT 06536-0812.

Yale University is an Equal Opportunity/Affirmative Action Employer

DEPARTMENT OF BIOLOGICAL SCIENCES

ST. JOHN'S
UNIVERSITY
NEW YORK

ASSISTANT/ASSOCIATE PROFESSOR

The Department of Biological Sciences at St. John's University in New York is continuing to expand a sizeable group of energetic, interactive faculty working in the general area of Cell and Molecular Biology. Two tenure-track positions starting Fall 1993 offer competitive salary and start-up funds,

supportive atmosphere, and attractive work environment. Ph.D. & postdoctoral experience, research productivity commensurate with faculty rank, potential to establish an extramurally-funded research program (Assistant Professor) or record of research funding (Associate Professor), and interest in teaching undergraduates as well Ph.D. and M.S. students are required. Teaching responsibilities include either undergraduate microbiology or developmental biology, and a graduate course in any appropriate area. Send c.v., statement of research interests and names of three references to:

Dr. Tim Carter, Chair,
Dept. of Biological Sciences
St. John's University
Jamaica, NY 11439

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**ST. JOHN'S
UNIVERSITY**
FOUNDED BY THE VINCENIAN COMMUNITY

NATIONAL INSTITUTES OF HEALTH NATIONAL INSTITUTE OF DENTAL RESEARCH

CHIEF, BONE RESEARCH BRANCH

The Intramural Research Program of the National Institute of Dental Research invites nominations and applications for the position of Laboratory Chief, Bone Research Branch.

The Chief, Bone Research Branch will be responsible for planning, directing and conducting research programs to determine the genesis, structure, function and pathobiology of teeth, bone and other mineralized tissues, using techniques of genetics, cell biology, biochemistry, molecular biology, nuclear magnetic resonance and other advanced methodologies. Research in the Branch is relevant to the diagnosis, treatment and prevention of diseases of the craniofacial and other skeletal tissues. Appointee will have latitude in the recruitment of other senior scientists, post doctoral fellows and technicians.

Applicants should have a Doctoral degree with accomplishments in an area of interest to the laboratory and with demonstrated ability for administrative leadership. Position is available immediately. This is a Civil Service position, GM15. Physicians and Dentists may be eligible for Physicians Comparability allowance. Alternatively, appointment in the Commissioned Corps of the U.S. Public Health Service may be appropriate. U.S. citizenship is required.

Applicants must submit an SF-171 (available in any Federal personnel office), curriculum vitae, brief statement of research directions and the names of three references. Documents must be submitted no later than January 31, 1993.

Ms. Faye M. Harbrant
Personnel Management Specialist
National Institute of Dental Research
National Institutes of Health
Building 31, Room 2C23
9000 Rockville Pike
Bethesda, MD 20892



NIH is an Equal Opportunity Employer

POSITIONS OPEN

ASSISTANT PROFESSOR, GENETICS. Department of Biochemistry, University of Alabama at Birmingham. Several tenure-track faculty positions are available in 1993. Areas of particular interest include chromosome structure and function, transcriptional regulation, RNA processing and control of development in lower and higher eukaryotes; however, outstanding candidates in any area of genetics are encouraged to apply. Successful candidates will teach in graduate and medical/dental curricula as well as direct active research programs. Please send curriculum vitae, a brief statement of present and future research interests, selected reprints and the names/addresses of three references by January 31, 1993 to: **Dr. Tim Townes, Search Committee Chairman, Department of Biochemistry, Schools of Medicine/Dentistry, University of Alabama at Birmingham, Birmingham, AL 35294. An Equal Opportunity/Affirmative Action Employer.**

BIOLOGY POSITION

Animal cell biologist/cell physiologist, vertebrate or invertebrate, to teach upper division courses in an area of specialty for majors, lower division courses in cell biology, and develop and teach courses for non-majors as a part of an important program of general studies. Candidates who use techniques of modern molecular biology and/or immunology to investigate basic problems in cell biology/cell physiology will be given special consideration. The department maintains an active research program that involves undergraduate students. As a part of that program, the candidate will be expected both to seek personal grants and to contribute to collaborative departmental site grants. Ph.D. required: rank commensurate with training and experience. *Members of groups traditionally underrepresented in the sciences are especially encouraged to apply.*

Pepperdine University is a Carnegie level I, "national" private, Christian, liberal arts university under the control of a self-perpetuating Board of Regents and is related to the Churches of Christ. The Division is seeking candidates who are actively supportive of the university's Christian commitment "which celebrates and extends the spiritual and ethical ideals of the Christian faith." *Pepperdine University is an Equal Opportunity Employer and actively encourages women and minority applications.*

Applications will be reviewed until a suitable candidate is found, but should be received by February 1, 1993 to ensure consideration.

Mail curriculum vitae, names and addresses of three references to: **Chair, Biology Search Committee, Natural Science Division, Pepperdine University, 24255 Pacific Coast Highway, Malibu, CA 90263.**

MARINE BIOLOGIST: The Department of Biological Science at Florida State University invites applications for a tenure-track position with the rank of **ASSISTANT PROFESSOR**, in organismal marine biology (broadly interpreted). We especially want applicants who would complement our present strengths in ecology, evolution, and marine/aquatic biology. In addition to quality undergraduate teaching, faculty are expected to establish productive research programs and to contribute to the professional development of graduate students. Send a letter of application, curriculum vitae, statement of research interests, and names and addresses of three references by February 5, 1993 to: **Search Committee, c/o Dr. Joseph Travis, Chairman, Department of Biological Science, Florida State University, Tallahassee, FL 32306-2043. The Florida State University is an Affirmative Action/Equal Opportunity Employer. Applications from women and minorities are encouraged.**

BIOLOGY, ASSISTANT PROFESSOR, tenure-track position beginning Fall 1993. Teach undergraduate Animal Physiology, Biochemistry, and introductory biology courses; supervise undergraduate research. May involve some teaching of Human Anatomy and Physiology. **Qualifications:** Ph.D. completed by February 1, 1993 in biology, physiology, or related discipline; strong commitment to liberal arts and teaching; good general knowledge of biology required. **Salary:** Minimum: \$28,200. Send letter of application, résumé, description of your undergraduate teaching experience and philosophy, and three letters of reference (with evaluation of candidate's teaching experience) by February 1, 1993 to: **Gaynelle Pratt, Office of Human Resource Management, Keene State College, Keene, NH 03431. Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR OF BIOCHEMISTRY

Tenure-track faculty position (95% research, 5% instruction/service) supported by a full-time technician and seed money. Salary negotiable. Ph.D. or D.V.M./Ph.D. is required with research interests in a modern area of biochemistry, preferably involving infectious diseases of animals. Postdoctoral experience, a record indicating ability to perform independent research, and potential to establish competitive, extramurally funded research programs are required. The successful candidate will collaborate with faculty and participate in the graduate program. Send curriculum vitae, statement of research interests and goals, and arrange for three letters of recommendation to be sent to: **Chair, Search Committee; Veterinary Molecular Biology, Marsh Laboratory; Montana State University; Bozeman, MT 59717-0360. Screening begins March 1, 1993; hiring contingent upon availability of funds. Veterans Preference. ADA/Equal Opportunity/Affirmative Action Employer.**

FACULTY POSITION—BIOCHEMISTRY WEST VIRGINIA STATE COLLEGE

Applications are invited from persons holding a Ph.D. degree in Biochemistry for a full-time, tenure-track position at the **ASSISTANT or ASSOCIATE PROFESSOR** level in an ACS-approved Chemistry Department of a four-year state college. A strong commitment to excellence in teaching is mandatory.

The Department of Chemistry at West Virginia State College offers a four-year B.S. in Chemistry and a two-year A.A.S. in Chemical Technology. Responsibilities include teaching biochemistry lecture and lab, introductory and general chemistry lecture and lab, and developing an undergraduate research program for chemistry majors. Starts August 16, 1993. Salary commensurate with qualifications. Excellent benefit package.

West Virginia College is a historically black college which has evolved into a fully accessible, racially diverse, and multi-generational institution. It is the largest institution of higher education in the Charleston, West Virginia metropolitan area, with an annual enrollment of approximately 5,000 students. *West Virginia State College is an Affirmative Action/Equal Opportunity Employer and actively solicits applications from women and minorities.*

Send application letter, résumé, statement of teaching and research philosophy, official undergraduate and graduate transcripts, and three letters of recommendation by March 15, 1993 to:

**Barbara J. Oden, Ph.D.
Vice President for Academic Affairs
West Virginia State College
P.O. Box 1000
Institute, WV 25112-1000**

ASSISTANT PROFESSORS, Biological Sciences, University of South Alabama. Two tenure-track positions beginning in Fall 1993. Ph.D. in biological sciences required, postdoctoral experience desirable. Candidates should have a commitment to teaching and show evidence of participation in extramurally funded research. Main teaching responsibilities are in **Invertebrate Biology** including **Parasitology** for one position and in **Plant Physiology and Introduction to Nonvascular Plants** for the other. Opportunity for development of graduate courses in the candidates' areas of specialization will also be provided. Initial teaching load reduced to allow time for required development of research program. Salary competitive. Graduate programs include the M.S. in Biology and Ph.D. in Marine Sciences. The Department of Biological Sciences has 14 full-time faculty and modern research facilities. USA has 12,000 students, 8 colleges, many M.S. programs, 4 Ph.D. programs, and includes a comprehensive medical center. The location is a wooded campus in a mild Gulf Coast environment. Send a letter of application, curriculum vitae, and names, addresses and telephone numbers of at least 3 references to: **Dr. John A. Freeman, Chair, Department of Biological Sciences, University of South Alabama, Mobile, AL 36688 (Telephone: 205-460-6331). Deadline for receipt of applications is February 26, 1993. An Equal Opportunity/Affirmative Action Employer.**

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

POSITIONS OPEN

ASSISTANT PROFESSOR IN PHARMACOLOGY

University of Texas Health Science Center at San Antonio

The Department of Pharmacology is expanding and has tenure-track openings for several assistant professors. Candidates at the entry level should have at least two years of postdoctoral experience and a strong commitment to excellence in research and teaching. Preference will be given to candidates whose research is relevant to neurobiology or neuropharmacology, with approaches ranging from molecular to behavioral. Applications from individuals with multidisciplinary skills are particularly encouraged.

Interested candidates should submit curriculum vitae, a brief statement of research plans and the names of three references to:

**Cathie Franks
Coordinator, Faculty Search Committee
Department of Pharmacology
The University of Texas Health Science Center at San Antonio
7703 Floyd Curl Drive
San Antonio, TX 78284-7764**

The University of Texas Health Science Center at San Antonio is an Affirmative Action/Equal Opportunity Employer.

The Department of Biological Sciences at the University of Tennessee at Martin invites applications for two tenure-track **ASSISTANT PROFESSOR** positions for August 1993. Ph.D. by time of employment required. One position will be in evolution/animal population ecology and the other will be in genetics/molecular biology. Each position will require teaching courses in the specialties along with teaching in the introductory biology courses. All teaching is at the undergraduate level and we seek individuals committed to excellence at that level. Other responsibilities in the department and university and other interactions with students are expected. Applicants should submit an application letter, curriculum vitae, three letters of reference from individuals who can comment on your capability as a teacher to: **Dr. James E. Deck, Chairperson of the Search Committee, Department of Biological Sciences, University of Tennessee at Martin, Martin, TN 38238. Review of applications will begin on February 1, 1993 and continue until the position is filled. The University strongly encourages applications from minorities and women. The University is an Equal Opportunity/Affirmative Action/Title 9/Section 504/ADA Employer.**

ASSISTANT PROFESSOR, NEUROSCIENCE

A **tenure-track** position is available July 1993, Department of Neuroscience, University of California, Riverside. We are seeking outstanding applicants with strong research and teaching interests in any subfield of basic neuroscience. Priority will be given to applications received before 15 March 1993. Applicants should send curriculum vitae, copies of publications, statement of research and teaching interests, and arrange for at least three letters of reference to be submitted to: **Glenn I. Hatton, Chair, Department of Neuroscience, University of California, Riverside, CA 92521. Women and minorities are encouraged to apply. Equal Opportunity/Affirmative Action Employer.**

ASSISTANT PROFESSOR OF PHYSIOLOGY, tenure-track. Successful applicant is expected to teach gastrointestinal physiology to veterinary and graduate students. Candidates must have Ph.D. and postdoctoral training; preference will be given to those with D.V.M./Ph.D. Send curriculum vitae and three letters of reference to: **Dr. Michael H. Sims, Department of Animal Science, College of Veterinary Medicine, The University of Tennessee, P.O. Box 1071, Knoxville, TN 37901. UT is an Affirmative Action/Equal Opportunity Employer.**

ASSISTANT PROFESSOR of Physiology. Tenure-track position. Joint appointment in Surgery-ENT/Physiology. Develop and direct new research in secretory function of dark cells in inner ear. Postdoctoral experience required. Salary \$35,000 or higher depending on qualifications. Send letter and curriculum vitae to: **William Davis, M.D., Division of ENT, One Hospital Drive, MA314, Columbia, MO 65212. University of Missouri is an Equal Opportunity and Affirmative Action Employer. Women and minorities are encouraged to apply.**

Universität Potsdam

Deutsches Institut für Ernährungsforschung
Potsdam-Rehbrücke (DIeF)

The "Deutsches Institut für Ernährungsforschung Potsdam-Rehbrücke" - a foundation funded by the Land Brandenburg and the Federal Government (Blaue Liste) - will appoint 6 professors (C₃) together with the Universität Potsdam for the following research areas:

1. Nutrition toxicology
2. Vitamin metabolism
3. Molecular Genetics
4. Gastrointestinal Microbiology
5. Human Nutrition and Nutrition epidemiology
6. Physiology of Energy metabolism

These professors will be delegated from the University to the DIeF in order to lead research groups at the DIeF. There will be a teaching obligation (2 hours/week) at the University. The University and the DIeF will organize jointly a curriculum of "Human nutrition".

The University and the DIeF aim at raising the percentage of female scientists and encourage applications of women researchers. Handicapped scientists will be taken into consideration by preference in case of comparable qualification.

Researchers holding the degree 'Habilitation' or similar qualification are requested to submit two sets of curriculum vitae and list of publications within 4 weeks after the appearance of this advertisement to:

Gründungsdirektor der Universität Potsdam,
Am Neuen Palais 10, D-0-1571 Potsdam, Germany

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- **Research Scientists**
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- **Product Transfer Chemists**
- **Manufacturing Chemists**
- **QA Auditor**

Managers and Group Leaders will have advanced degrees (PhD preferred) in chemistry, biochemistry or life sciences and supervisory experience in the industrial sector. Demonstrated research emphasis in protein chemistry, immunology or clinical chemistry a plus.

Send your CV or resume to: Bio-Rad Laboratories, Attn: Paul Krueger, Dept. 524, 3726 E. Miraloma Blvd., Anaheim, CA 92806. An Equal Opportunity Employer, M/F/D/V.

BIO-RAD Bio-Rad Laboratories

January 1, 1993

THE REPLIGEN

VOLUME 13

REPORT

Scientific challenge is the order of the day at Repligen. Located in Cambridge, Massachusetts, one of the nation's premier biotechnology centers, our ongoing success and accomplishments continue to strengthen our dedication to leading edge research committed to healthcare. In conjunction with recent clinical trials in cancer therapy, we have grown from 129 to 275 employees over the past 12 months and, with the completion of our new manufacturing pilot plant, we will begin 7-day operations starting in January. We have also filed our second IND resulting from our inflammation research program initiated less than 2 years ago, and recently received Notice of Allowance for our patent covering the use of purified platelet factor-4 and recombinant platelet factor-4 for heparin neutralization.

As we enter another promising year of breakthroughs and accomplishments, we seek the following individuals to join us:

DIRECTOR OF INFLAMMATION RESEARCH

This scientist manages all research and preclinical activities for our anti-inflammatory therapeutics by establishing overall project objectives, coordinating project research and development strategies, and participating in the development of anti-inflammatory leads from the integrin project. Candidates must possess 7-10 years' experience in a pharmaceutical or biotechnology company with direct responsibility for a research and development project, preferably in one of the following areas: therapeutic proteins, neutrophil biology, surface receptor structure and function, or acute inflammatory disease research.

PRINCIPAL INVESTIGATOR

We seek an individual to establish programs for comprehensive evaluation of pharmacological properties of new drug candidates and manage clinical sample analysis in support of multiple drug development programs. To qualify, applicants must possess a PhD or DVM, or an MD, plus 4-7 years' post degree research experience with a background in the application of immunoassay methodology and radioisotope use in animals. Experience with protein evaluation and regulatory compliance preferable.

RESEARCH SCIENTIST/ PRINCIPAL INVESTIGATOR

In this position, you will study the structure/function relationships of surface receptors found on lymphocytes, as well as conduct analysis of gene expression and cell-based bioassays. Candidates must possess a PhD in Cellular or Molecular Biology, plus 2-5 years' post doctoral experience and expertise in genetic manipulations including cloning, mutagenesis, PCR and expression of genes and their mutant forms in eukaryotic cells.

Repligen offers competitive salaries, benefits and equity participation. Please submit or FAX a cover letter, CV and references to: Deirdre Purple, Repligen Corporation, One Kendall Square, Building 700, Cambridge, MA 02139. FAX (617) 494-1786. An Equal Opportunity Employer, M/F/D/V.

RepliGen



CANCER BIOLOGISTS

At Genentech, we are proud of the reputation we have built for the quality, commitment and diversity of our research efforts as well as for our business success. Our commitment to R&D starts with finding the top scientific talent in many fields of biological science, and continues with an R&D expenditure of over 50% of revenues. Our scientists publish over 200 papers per year, and the citation rate for these manuscripts match the best universities and research institutions. We now occupy a new \$85 million, 275,000 square-foot research facility.

We're seeking Cancer Biologists who have an MD and/or PhD with 3-5 years' industrial or academic experience and training in molecular, cell or tumor biology. Experience with animal models is strongly desired. You should have outstanding scientific credentials, and the drive, creativity and vision to contribute to and support an ongoing cancer program involving oncogenes, signal transduction, metastatic processes and tumor angiogenesis for the ultimate goal of developing novel therapeutics.

Genentech offers an extensive benefits package which includes fully paid dental/medical/vision coverage, child care facilities, free health club membership and an employee stock purchase plan. To apply, please send your Curriculum Vitae to Dr. Art Levinson, Vice President of Research, Mailstop VS-1, Genentech, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We promote and actively support affirmative action and equal employment opportunity.

Genentech, Inc.

Cancer Center Director

The University of Southern California School of Medicine seeks a Director for the Kenneth Norris Jr. Cancer Center, an NCI-designated Comprehensive Cancer Center. Candidates with either basic science or clinical orientations will be considered. The Center is searching for a leader with a strong record of research achievement and administrative experience in cancer-related areas. Responsibilities of the Director include: developing program goals and directions for the teaching and research activities that take place under the auspices of the Cancer Center; working with other administrative officers of the School of Medicine and the University to ensure the integration and continuity of these activities; directing the preparation of funding applications including the institution's Cancer Center (Core) Support Grant; and overseeing the operation of a 60 bed cancer hospital. The existing strengths of the Cancer Center include the programs in gene regulation, tumor biology, developmental therapeutics, immunobiology and therapy, cancer etiology, and cancer prevention research and education as well as strong established programs in gynecological, urological, medical and hematological oncology. A developing strength includes a program in gene therapy. The Kenneth Norris Jr. Comprehensive Cancer Center is an organized research unit of the USC School of Medicine. The Center's headquarters is located in a freestanding building housing a 60 bed cancer hospital and 28,000 nsf basic research laboratory space. A major expansion of this facility is under construction and will be completed in 1994, adding research laboratories, offices and support space for clinical and cancer cause and prevention faculty, and greatly enlarged outpatient clinical facilities. The Director reports directly to the Dean of the School of Medicine. Letters of application should include a curriculum vitae with a summary of relevant research, clinical, and administrative experience, and the names of at least three references. Applications will be accepted until the position is filled. Please send letters of application to Phyllis M. Rideout, Ph.D., Executive Secretary, Norris Cancer Center Director Search Committee, Kenneth Norris Jr. Comprehensive Cancer Center, P.O. Box 33800, Los Angeles, CA 90033-0800. *The University of Southern California is an Affirmative/Equal Opportunity Employer. Applications from women and people from diverse racial, ethnic and cultural backgrounds are encouraged.*

RESEARCH SCIENTIST & TECHNICIAN DNA Analysis Technology

Molecular Tool, Inc. is a biotechnology company located in Baltimore, Maryland committed to the development and commercialization of highly integrated, DNA-based systems for the analysis of complex genomes and genetic loci. Together with a key industry partner, Molecular Tool has embarked on a significant research and product development program for the near-term implementation of a large-scale DNA analysis system.

Creative and motivated **chemists** and **biochemists** are invited to apply for research scientist and technician positions. Successful applicants will be responsible for the development of new systems for solid phase immobilization, analysis, and synthesis of nucleic acids. Candidates with experience in the following areas are encouraged to apply:

- **Surface Chemistry**
- **Nucleic Acid Chemistry**
- **Solid Phase Synthesis**

Situated on a campus of the Johns Hopkins University School of Medicine, Molecular Tool, Inc. offers a stimulating scientific environment, competitive salaries, an incentive program and medical insurance benefits. Interested candidates should send a resume together with the names of three professional references to: **Ms. Loretta Burrows, Molecular Tool, Inc., Alpha Center, Hopkins Bayview Research Campus, 5210 Eastern Avenue, Baltimore, MD 21224.**

MOLECULAR TOOL, INC.

KUWAIT UNIVERSITY

Faculty of Science

DEPARTMENT OF BOTANY & MICROBIOLOGY

Applications are invited for the post of **Associate Professor or Assistant Professor** tenable in September 1993, in the following disciplines:

1. Plant Physiology

With particular experience in plant growth and development (Hormones and Growth Regulation).

2. Applied Microbiology

With experience in biotechnological and environmental aspects.

3. Ecophysiology

Ecophysiology of higher plants in extreme environments (under drought, heat or salinity stress).

4. Molecular Immunology

5. Aquatic Microbiology

Emphasis on marine microbial ecophysiology.

Attractive salary (tax free), with added benefits (furnished residence, air tickets for the family up to three children, mid-term and summer holidays).

Applications and conditions of service are available from the following address:

Kuwait University Office
3500 International Drive, N.W.
Washington, D.C. 20008
Tel. No. (202) 363-8055

Completed applications together with non-returnable academic documents should be submitted to:

The Chairman
Department of Botany & Microbiology
Faculty of Science
Kuwait University
PO Box 5969 Safat
13060 Safat
KUWAIT
Fax No.: (965) 484-7054

UNIVERSITY OF MINNESOTA

Director: Institute for Lake Superior Research

The Institute for Lake Superior Research is a university-wide unit established to promote and facilitate basic research on large lakes. Its mission is to assist in maintaining the ecological integrity of Lake Superior and its watershed by providing a knowledge base necessary to guide policy decisions. Lake Superior provides a natural laboratory through which research initiatives might be developed.

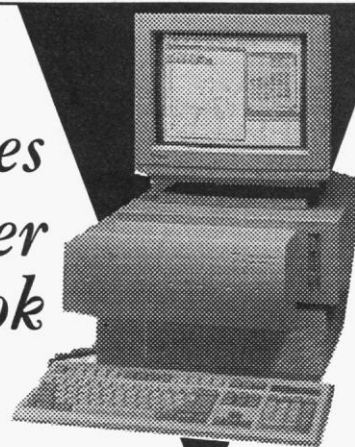
The Director will be responsible for building the program at the University of Minnesota, developing a critical mass and providing leadership in a university-wide consortium of cooperating laboratories. The Institute should complement other programs on the Great Lakes and initiate or participate in international projects in the aquatic sciences. This position represents a consolidated focus of research in limnology.

Requirements: The Director should have a Ph.D. or equivalent degree; a demonstrated international reputation, in physical, chemical or biological research in large lakes or oceans; interests in problems of global environmental relevance; and close ties with the ocean community. The Director should have expertise in management, and experience in budgeting. The position is offered at the professor level concomitant with academic, educational, and service obligations, with tenure in an appropriate department. Salary and benefits are commensurate with experience and other programs at the University of Minnesota.

Please send letter of application with curriculum vitae, and the names of four referees, postmarked by Saturday, March 13, 1993, to either Graham A. Tobin or Kerry Kelts, Co-Chairpersons of the Search Committee, c/o Institute for Lake Superior Research, 135 Medical Bldg., University of Minnesota-Duluth, Duluth, MN 55812, USA.. Fax: (218) 726-6254; Tel: (218) 726-7294.

The University of Minnesota is an equal opportunity educator and employer.

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Biological researchers the world over rely on Molecular Dynamics to facilitate breakthrough research. We combine bio-imaging technologies and support software in imaginative, competitive new ways that help scientists quickly analyze and quantify the molecular components of life.

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APPLICATIONS MANAGER

Molecular Dynamics seeks a senior scientific marketing manager to develop an applications group to support gel scanning instrumentation and reagent systems. The applicant should have a Ph.D. in Molecular Biology or related field and several years experience directing research, preferably in an instrumentation or reagent company. Knowledge of fluorescence and radioactive detection techniques essential. Sales or marketing experience a plus. Responsibilities will include:

- Developing new applications
- Analysis software design
- Writing marketing support materials
- Customer support
- Customer training programs

PRODUCT MARKETING MANAGER

You will develop and manage marketing programs for one of our leading products. Your 3+ years' minimum related experience must include biotechnology/laboratory equipment marketing, a BS/MS technical degree and some directly related sales experience. In addition, you should have proven team management as well as excellent written and verbal communication skills.

We provide the opportunity for you to make a difference. You provide the drive and skills to continue our progress. We offer a complete compensation/benefits package, including sabbaticals, and an environment that nurtures innovation and excellence. Please send a letter of introduction and your resume to: **John Gordon, V.P. Human Resources, Molecular Dynamics, 880 E. Arques Avenue, Sunnyvale, CA 94086.** We are an equal opportunity employer.



POSITIONS OPEN

STAFF SCIENTIST, for manufacturer in the Cincinnati area. Develop and implement a research program to identify novel nonsteroidal anti-inflammatory drugs (NSAIDs) to treat rheumatoid arthritis and osteoarthritis that display significant therapeutic advantages over current antiarthritic drugs. Based upon this program identify new approaches to intervene therapeutically in arthritis. Develop *in vitro* assays to evaluate the effects of new chemicals on the biosynthesis of inflammatory mediators proposed to play a role in the pathogenesis of arthritis, such as arachidonic acid metabolism and cytokine production. Specifically, using cell culture techniques develop *in vitro* assays for arachidonic acid metabolism and cytokine production (interleukin-1, interleukin-6, tumor necrosis factor, etc.) Develop *in vivo* biological assays to measure the effects of oral doses of new chemicals on arachidonic acid metabolism and cytokine production. Additionally, use *in vivo* biological assays to explore whether these chemicals possess analgesic, anti-inflammatory, antipyretic and antiarthritic activity. Identify the structural requirements to develop a new NSAID to treat arthritis. Ph.D. in physiology required plus one year of experience in job offered or one year of experience as a Pre- or Postdoctoral Researcher in the pharmacological actions of inflammatory mediators in *in vitro* inflammatory cell cultures and whole animal assays. One year of experience must involve use of techniques to extract, purify, and quantify prostaglandins, thromboxanes, interleukins, tumor necrosis factor, and other inflammatory mediators; and, use of chromatographic and radioimmunoassay techniques.

Forty hours per week, 8:00 to 4:30. Salary: \$55,000 per year. *Must have proof of legal authority to work indefinitely in the United States.* Send résumé in duplicate (no calls) to: L. Ellison, JO #1230886, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

STAFF SCIENTIST—Cereal Chemist, for manufacturer in the Cincinnati area. Develop understanding of ingredient functionality and interactions during cake baking. Evaluate current baking mix products for performance characteristics. Develop analytical methods to measure changes of ingredients during baking and characteristics of finished cakes. Develop scientific mechanism theories for baking mix product performance and design and conduct research to test theories. Develop, design and test mechanisms and theories for improvements of product performance. Develop understanding of how the flavor system reacts with the ingredients and how interactions affect flavor retention in low fat cake systems. Develop a feasible flavor system for low fat cakes mixes and the process for incorporating the flavor system into mix. Ph.D. in Cereal Science or Food Science required plus one year of experience in job offered or one year of experience as a Pre or Postdoctoral Researcher in flour rheology, baking science, wheat carbohydrate and wheat protein, flavor retention and flavor chemistry. One year of experience must involve analytical instrumentations including high performance liquid chromatography, gas chromatography, gel filtration, mass spectrometry and electrophoresis techniques; and flour quality and rheology instrumentations including farinograph, alveograph, extensograph, mixograph, amylograph and falling number determination.

Forty hours per week, 8:00 to 5:00. Salary: \$55,000 per year. *Must have proof of legal authority to work indefinitely in United States.* Send résumé in duplicate (no calls) to: L. Ellison, JO #1230884, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

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Write to:

Science New Lab Service Department
1333 H Street, NW
Washington, DC 20005

POSITIONS OPEN

EPIDEMIOLOGIST INTERNATIONAL CANCER STUDIES

The Fred Hutchinson Cancer Research Center is seeking an experienced epidemiologist to develop and coordinate international studies of cancer risk factors. The intended studies will involve questionnaires and specimen collection on random samples of individuals in geographic areas covered by good cancer registries worldwide. The survey will examine the extent to which known cancer risk factors can explain international variations in cancer incidence rates, will provide information on diet and cancer associations that will complement emerging results from analytic epidemiology, and will provide the basis for studies of serum and DNA markers in relation to cancer risk. Candidates should have a Ph.D. or M.D. with training experience in epidemiology. Experience in nutritional epidemiology, cancer registration and survey sampling is highly desirable. Appointment at the Assistant or Associate Member level is intended and a corresponding academic appointment at the ASSISTANT or ASSOCIATE PROFESSOR level in the University of Washington's Department of Epidemiology is anticipated. Deadline for applications is March 1, 1993. *The Fred Hutchinson Cancer Research Center and the University of Washington are Equal Opportunity/Affirmative Action Employers.* Candidates should send curriculum vitae and list of four references to:

Dr. Ross Prentice
Director, Division of Public Health Sciences
Fred Hutchinson Cancer Research Center
1124 Columbia Street—MP-665
Seattle, WA 98104

BIOMEDICAL SCIENCES DEPARTMENT OF PHYSIOLOGY

The University of California (UC), San Francisco seeks applications for a tenure-track position of ASSISTANT or ASSOCIATE PROFESSOR in the Department of Physiology. We seek someone holding a Ph.D. and/or M.D. who will develop an active, independent research program that uses molecular, cellular or integrative methods to investigate problems in mammalian biology. The candidate will be expected to take an active role in a new Biomedical Sciences Graduate Program and to participate in teaching mammalian physiology to medical students. Applicants should include curriculum vitae, statements of teaching experience and research interests, reprints of up to three selected publications, and the names of three individuals who have been asked to submit reference letters. *Women and minorities are encouraged to apply.* Applications should be sent to: Chair, Search Committee, Department of Physiology, Box 0444, University of California, San Francisco, CA 94143-0444. *UC San Francisco is an Equal Opportunity/Affirmative Action Employer.*

The Department of Cell Biology of Baylor College of Medicine invites applicants for tenure-track positions at the ASSISTANT or ASSOCIATE PROFESSOR level. We are seeking candidates with expertise in the general area of cellular signalling cascades or membrane trafficking, with an emphasis on molecular or genetic approaches. Candidates should be committed to excellence in research and training, and have demonstrated the ability to develop an innovative and independent research program. Interested persons should write to: Dr. Lutz Birnbaumer, C. C. Bell Research Professor of Cell Biology, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, including curriculum vitae with a list of publications and a description of research experience and interest.

Women and minority candidates are encouraged to apply. Baylor College of Medicine is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR OF BIOLOGY

Tenure-track position beginning August 1993. Responsibilities include teaching undergraduate ecology and invertebrate biology, directing undergraduate research, and research. Ph.D. required. Teaching experience at the undergraduate level preferred. Send curriculum vitae, transcripts and names and addresses of three references by 31 January 1993 to: Dr. Beatrice Robinson, Department of Biology, Le Moyne College, Syracuse NY 13214. *Le Moyne College is a nationally recognized institution in the Jesuit tradition and is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

WETLAND ECOLOGIST

The Department of Environmental Sciences and Engineering at the University of North Carolina at Chapel Hill invites applications or nominations for a currently available tenure-track faculty position at the ASSISTANT/ASSOCIATE/FULL PROFESSOR level. We seek an individual with postdoctoral and field experience in process-oriented study of anthropogenic impact on population or community ecology and/or organismal interactions within wetland ecosystems. The ability to teach wetland ecology and limnology, as well as to develop an extramurally funded research program in wetland ecology or related areas, is an important consideration in our selection of candidates. Academic rank and salary will be based on the candidate's record of accomplishments. The search will continue until the position is filled, but potential candidates are encouraged to apply by January of 1993. Interested individuals should submit a complete résumé, including publication list; a summary of research and teaching interests, and the names of three references. Respond to: Dr. Frederic K. Pfaender, Chair, Ecologist Search, Department of Environmental Science and Engineering, CB #7400 University of North Carolina, CB #7400, Chapel Hill, NC 27599-7400. *The University of North Carolina at Chapel Hill is an Affirmative Action/Equal Opportunity Employer. Minority and female applicants are encouraged to apply.*

FACULTY POSITION, VIROLOGY

The Department of Microbiology at Colorado State University invites applications for an ASSISTANT or ASSOCIATE PROFESSOR tenure-track position to apply molecular biological approaches to problems in virology. Candidates should possess the Ph.D., D.V.M./Ph.D., M.D./Ph.D. or equivalent degree, and postdoctoral research experience in the biomedical sciences. The successful applicant will be expected to establish an independent research program, and participate in the teaching of the undergraduate, graduate and professional veterinary medical curricula. There will be ample opportunity to interact with faculty and students in our nationally recognized programs such as those concerning arthropod-borne infectious diseases, retroviruses, mycobacteria, and with the Diagnostic Laboratory of the Veterinary Teaching Hospital. Applicants should send curriculum vitae, a statement of research interests, and a list of at least three references to: Dr. Jonathan Carlson, Search Committee Chairman, Department of Microbiology, Colorado State University, Fort Collins, CO 80523, Telephone: 303-491-7840. Closing date for this application will be February 28, 1993. *Colorado State University is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT/ASSOCIATE PROFESSOR, biology education; tenure-track, earned doctorate in biology education or science education and master's or equivalent in biology content field required. **Position #20201, Biology Educator:** Individuals with expertise in vertebrate biology, especially developmental biology and anatomy/physiology are urged to apply. Applicants are expected to demonstrate quality teaching in pedagogy, general biology, and content areas of expertise and the ability to direct pedagogical research. Established research record required. Teaching and research is at both graduate and undergraduate levels. Submit (using position number and title) by 1 February 1993: letter of application, curriculum vitae, 3 references, transcripts, evidence of U.S. citizenship, and statements of teaching philosophy and research interests and plans to: Dr. April L. Gardner, Chair, Search & Screen Committee, Department of Biological Sciences, University of Northern Colorado, Greeley, CO 80639; Telephone: 303-351-2921, FAX: 303-351-1269. *Minorities and women encouraged to apply. The university is an Equal Employment Opportunity/Affirmative Action Employer. Position contingent upon adequate funding from the state legislature and final approval by the Board of Trustees.*

POSTDOCTORAL RESEARCH POSITION available immediately to carry out studies on regulation of gene transcription and alternative splicing in lipoprotein metabolism and atherogenesis. Send curriculum vitae to: Dr. Alan Tall, Department of Medicine, Columbia University, 630 West 168th Street, New York, NY 10032. *Columbia University is an Equal Opportunity/Affirmative Action Employer.*

Call for Papers

INTERNATIONAL CONGRESS ON THE HEALTH EFFECTS OF HAZARDOUS WASTE

The Agency for Toxic Substances and Disease Registry (ATSDR), Public Health Service, U.S. Department of Health and Human Services, announces the first International Congress on the Health Effects of Hazardous Waste, to be held May 3-6, 1993, at the Marriott Marquis Hotel in Atlanta, Georgia. The purpose of the Congress is to promote the exchange of findings and recommendations about human exposure to and health effects resulting from hazardous waste.

Abstracts are solicited for the following content areas: populations at risk, exposure assessment (including environmental measurements, modeling, and use of biologic markers), health effects resulting from exposure to toxic substances (including toxicologic studies, health effects studies, diagnostic strategies, and risk analysis), risk communication, technology and information transfer, health implications of emerging technologies, gaps in data, and research needs.

Abstracts should be received by ATSDR by mail or Fax by January 28, 1993.

Registration fee is \$100 by April 5, 1993, or \$125 at the Congress (\$50 for fulltime students).

Submit abstracts to:

John S. Andrews, Jr., M.D., M.P.H.
Associate Administrator for Science
Agency for Toxic Substances and
Disease Registry
1600 Clifton Road, NE, Mailstop E-28
Atlanta, GA 30333
Telephone: (404) 639-0708,
Fax (404) 639-0586

For registration material contact:

Howard Frumkin, M.D., M.P.H.
Director, Division of Environmental and
Occupational Health
Emory University School of Public Health
1599 Clifton Road, NE
Atlanta, GA 30329
Telephone: (404) 727-3697,
Fax: (404) 727-8744

NATIONAL ACADEMY OF SCIENCES SUMMER PROGRAMS FOR YOUNG INVESTIGATORS 1993-94

COLLABORATION WITH CENTRAL/EASTERN EUROPE AND EURASIA

DEADLINE: FEBRUARY 12, 1993

The NAS will sponsor three Young Investigator Programs (YIP) for the summers of 1993-94:

- 1) Ecological Concerns in the Development of the Arctic and Far Northern Regions (with Russia)
- 2) Nuclear Accidents and Radioactive Contamination (with Ukraine and Belarus)
- 3) Health Impacts of Environmental Degradation (with Czech Republic and Slovak Republic)

Each program will consist of two, three-week workshops help in consecutive years. The American teams are selected with an eye to interdisciplinary representation so as to foster an integrated approach to the problems under study.

Only those individuals engaged in teaching and/or research careers or those planning such careers are eligible to apply. Individuals entering this competition must have earned the Ph.D. degree, or achieved equivalent accomplishments, since January 1, 1986, and not later than January 1, 1993.

For application details contact:
Office for Central Europe and Eurasia (F02014)
2101 Constitution Ave., NW
Washington, DC 20418
ATTN: YIP 93-94
Tel: 202/334-2644; Fax: 202/334-2614

FACULTY POSITIONS IN MOLECULAR ONCOLOGY

St. Jude Children's Research Hospital

Seeks qualified molecular biologists for its expanding biomedical research program. The newly established Department of Experimental Oncology has immediate openings for several faculty positions. M.D.'s and Ph.D.'s whose research focuses on the genes and proteins involved in cancer induction and progression are encouraged to apply. Although preference will be given to physician-scientists who have recently completed postdoctoral training and have strong interests in molecular medicine, applicants with extensive experience in cancer research will be considered for positions at the associate and full-member levels. Successful applicants will work in a 240,000 square foot research center, completed in 1991, which houses all of the institute's scientific programs. Opportunities exist for interaction with specialists in Virology/Molecular Biology, Biochemistry, Immunology, Tumor Cell Biology, Pharmacology, Hematology/Oncology, and Infectious Diseases. St. Jude provides generous start-up funds, nationally competitive salaries and an excellent benefits package. A strong institutional commitment to the basic science faculty ensures stability in program development and continuity of research activities.

Applicants should submit a C.V., a letter summarizing their research accomplishments and goals, and the names of three references to:

Dr. A. Thomas Look, Chairman
Department of Experimental Oncology
St. Jude Children's Research Hospital
332 North Lauderdale
Memphis, TN 38105 U.S.A.

AFFIRMATIVE ACTION/EQUAL
OPPORTUNITY EMPLOYER

Deutsches Institut
für Ernährungsforschung
Potsdam-Rehbrücke (DIfE)

Associate Research Group Leader

The Deutsches Institut für Ernährungsforschung Potsdam-Rehbrücke - a foundation established January 1st, 1992, devoted to research aiming at prevention of nutrition-related diseases - seeks an investigator with strong research background to lead within the department of nutrition physiology the group on Protein Metabolism. The salary will be BAT 1a. The appointment will be for 5 years; a continuation after this time span is feasible.

The candidate is expected to establish a strong research program on protein and amino acid metabolism, including its implications for nutrition and clinical medicine. The application of stable isotopes will be indispensable.

Interested biochemists, physicians, biologists or nutritionists should send within 4 weeks after appearance of this advertisement curriculum vitae and list of publications to:

Prof. Dr. C.A. Barth
Wissenschaftlicher Direktor
Deutsches Institut für
Ernährungsforschung
Arthur-Scheunert-Allee 114/116
D-O-1505 Bergholz-Rehbrücke
Germany

POSITIONS OPEN

ASSISTANT PROFESSOR, Tenure-track—beginning Fall, 1993. The Department of Biological Sciences at Mankato State University (MSU) is seeking a microbiologist with demonstrated expertise in molecular biology and teaching experience in general microbiology. The successful candidate will be expected to teach general microbiology and advanced courses from among the following areas: medical microbiology, environmental microbiology and/or applied microbiology. The successful candidate will also advise undergraduate and master's degree candidates, participate in research to involve students at both the undergraduate and graduate level, and participate in faculty governance. Earned doctorate with microbiology emphasis required at time of employment. Postdoctoral and/or industrial experience desirable. Demonstrated ability to conduct independent research in an undergraduate/graduate setting an asset. Opportunity for collaboration with active research groups both within and outside the University. Send curriculum vitae, transcripts, and three letters of reference to: **Dr. Bill Bessler, Microbiology Search Committee, Biology Department, MSU Box 34, Mankato State University, Mankato, MN 56002-8400 or call (507) 389-2786.** Application deadline January 22, 1993 or until filled. Mankato is located approximately 85 miles southwest of Minneapolis/St. Paul with a local population of around 40,000. The University has a student population of 15,000, and is noted for strong commitment to regional service and education. Application from minorities and women encouraged.

MSU is an Equal Opportunity/Affirmative Action Employer.

The Biology Department of La Salle University, a Roman Catholic, four-year, liberal arts University under the auspices of the Brothers of the Christian Schools, invites applications for a tenure-track, **ASSISTANT PROFESSOR** position for September 1993.

The successful candidate must possess the Ph.D. and a demonstrated strength in undergraduate teaching. Demonstrated ability to teach upper division courses in molecular biology and biochemistry, and introductory biology courses is required. The ability to teach Immunology and/or Microbiology is an asset. Committee work, student advisement, active participation in department activities and continued professional development are also expected.

Applicants should submit a letter of application, curriculum vitae, statement of career goals and 3 letters of recommendation to: **Search Committee, Biology Department, La Salle University, 1900 West Olney Avenue, Philadelphia, PA 19141-1199.** Closing date: February 5, 1993 or until a suitable candidate is identified. *La Salle University is an Equal Employment Opportunity/Affirmative Action Employer and Educator. Women and minorities are encouraged to apply.*

INSECT EVOLUTIONARY/SYSTEMATIC BIOLOGIST at the University of Maryland, College Park. Tenure-track **ASSISTANT PROFESSOR** position starting January 1, 1994. Research interests in insect systematics and/or evolutionary aspects of insect biology, e.g. behavior, ecology, morphology, embryology or physiology. The position includes teaching responsibilities in insect classification and morphology, and in the incumbent's specialty. The successful candidate will participate in a systematics/evolution graduate program. Applicants must hold a Ph.D., and should send curriculum vitae, a statement of research and teaching experience and goals, complete transcripts, and the names of 5 referees to: **Insect Comparative Biology Search, Department of Entomology, University of Maryland, College Park, MD 20742 by February 12, 1993.** *Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION available using recombinant DNA techniques to study cloned Na⁺-dependent cotransporters, including a renal Na⁺/nucleoside cotransporter (see *J. Biol. Chem.* 267:3557, 1992). Preference will be given to candidates with experience in either transport physiology (of carriers or channels), molecular biology, or protein biochemistry. Salary and start date negotiable. Applications accepted until position is filled. Send curriculum vitae and names of three references to: **Dr. A. M. Pajor, Department of Physiology, University of Arizona, Life Sciences South Room 514, Tucson, AZ 85721.**

The University of Arizona is an Affirmative Action/Equal Opportunity Employer—applications from females and minorities are encouraged.

POSITIONS OPEN

ASSOCIATE DIRECTOR AGRICULTURAL EXPERIMENT STATION

College of Agriculture
University of Illinois at Urbana-Champaign

The Associate Director will assist the Director in administering the programs, facilities and personnel of the Illinois Agricultural Experiment Station (IAES). The IAES has 170 FTE scientists and monitors \$35 million annual expenditures. An earned Ph.D. degree and national reputation in research in Agriculture, Home Economics or related science is required. Applicants must be tenurable in one of the academic units of the College. To ensure full consideration, applications should be received by February 15, 1993. Send an application letter including a one-page summary of past accomplishments with curriculum vitae, publication list, and a list of names, addresses and telephone numbers of at least 3 references to: **Dr. John W. Erdman, Jr., Chair, Search Committee, Agricultural Experiment Station, 211 Mumford Hall, 1301 West Gregory Drive, Urbana, IL 61801.** Full position description is available from address above. *The University of Illinois is an Affirmative Action/Equal Opportunity Employer and women and minorities are encouraged to apply.*

TENURE-TRACK POSITIONS in Cellular and Molecular Immunology of the GI Tract, Department of Medicine, University of Chicago.

TENURE-TRACK RESEARCH POSITIONS in the Inflammatory Bowel Disease (IBD) Research Center at the University of Chicago are now available. The newly constructed research facility of 5,500 square feet is scheduled to open in September 1993.

Individuals with a strong background in mucosal immunology, oral tolerance, cytokine research, autoimmune disease mechanisms and basic cellular and molecular immunology are being sought. Previous work or interest in IBD is not required. Individuals desiring to branch into studies related to IBD are encouraged to apply. Minimum requirements include a doctoral degree and extensive postdoctoral experience.

Appointments will be considered at the **ASSISTANT** and **ASSOCIATE PROFESSOR** level and generous funding is available for the establishment and initial support of the individual research programs. Applicants should send curriculum vitae, reprints of recent work, a statement of research interests and names of suitable references to:

**Eugene B. Chang, M.D., Director
Inflammatory Bowel Disease Research Center
The University of Chicago
Department of Medicine/GI, MC 4076
5841 South Maryland Avenue
Chicago, IL 60637**

Telephone: 312-702-6458; FAX: 312-702-2182
An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION to examine interactions between *Mycobacterium tuberculosis* and HIV. Send curriculum vitae and names of 3 references to: **Michael M. Lederman, M.D., Division of Infectious Diseases, CWRU School of Medicine, 10900 Euclid Avenue, Cleveland, OH 44106-4984, USA.** *CWRU is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITIONS

University of New Mexico Cancer Center in the laboratories of: **Steve Jenison:** Study of humoral immune responses to papillomavirus infections and the potential for antigenic variation among human papillomavirus isolates. Requisition # 1051-92B. **Cheryl Willman:** Studies of the Interferon Regulatory Factor-1 (IRF-1) Tumor Suppressor Gene in human leukemia and preleukemic myelodysplasia (MDS). Requisition # 1226-92B. **Laurence Elias:** Study of the role of oncogenes and tumor suppressor genes in modulating the response of leukemic cell lines to tumor necrosis factor. Requisition # 1227-92B.

These positions are open to both Ph.D. and M.D. scientists. They require a strong background in molecular biology and biochemistry applicable to study of the molecular basis of human cancer. Send signed letter of application referencing one of the requisition numbers above, curriculum vitae and names of three references to: **Medical Center Human Resources, Medical Building 2, Room 101, Albuquerque, NM 87131-5023.** *Equal Opportunity Employer.* Applications must include a cover letter with an original signature. Closing date for all positions: **March 12, 1993.**

POSITIONS OPEN

FACULTY POSITION IN BIOCHEMISTRY

The Department of Biochemistry at The University of South Alabama College of Medicine seeks applicants for a tenure-track position at the level of **ASSISTANT** or **ASSOCIATE PROFESSOR** to begin by September 1, 1993. Very competitive salary, start-up funds and laboratory space are available. Candidates must show strong promise of maintaining extramural funding for their research. Although excellence of the individual is more important than his/her areas of study, those whose research combines biochemistry, molecular biology and other experimental approaches to study mechanisms of human disease are especially encouraged to apply. Faculty will also participate in the training of both medical and graduate students. Send curriculum vitae, representative publications, a statement of research goals and names of three references (by March 1, 1993) to: **Dr. Nathan N. Aronson, Chairman, Department of Biochemistry (MSB 2146), University of South Alabama, College of Medicine, Mobile, AL 36688-0002.** *The University of South Alabama is an Affirmative Action/Equal Opportunity Employer, M/F/D.*

POSTDOCTORAL FELLOWSHIP IN MOLECULAR HEMATOPOIESIS HARVARD MEDICAL SCHOOL

A position is available January 1993 to join an NIH-funded project examining the structure-function relationships of erythropoietin, the hormone responsible for red blood cell production. Applicants should have a Ph.D. and experience in molecular biology and biochemistry. Please send curriculum vitae and three references including telephone numbers to: **H. Franklin Bunn, M.D., Harvard Medical School/Brigham & Women's Hospital, 221 Longwood Avenue, LMRC-2, Boston, MA 02115.** Or FAX: 617-739-0748. *Harvard Medical School is an Equal Opportunity/Affirmative Action Employer.*

TWO POSTDOCTORAL/RESEARCH ASSOCIATE POSITIONS, available immediately in NIH-funded lab to study: protein glycosylation, prenylation, and trafficking; membrane assembly and turnover; lipid biosynthesis and intracellular transport. Strong background in protein and/or lipid biochemistry essential. Send curriculum vitae, reprints, and name/telephone number of three references to: **Dr. Steven J. Fliesler, The Eye Institute, St. Louis University School of Medicine, St. Louis, MO 63110.** *An Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSISTANT for university in central Ohio. Researches molecular factors involved with drug resistance in cancer treatment using molecular biology techniques including DNA/RNA isolation from human leukocytes and tissue specimens, restriction enzyme digests, gel electrophoresis including pulsed field, northern and southern blotting; performs immunohistochemical reactions; maintain cell cultures; analyzes data; order lab supplies. No experience required in above duties but applicants will qualify with B.S. in Pathology or Biological Science including coursework related to cancer chemotherapeutics in the form of at least one course each in pharmacy, surgical treatment, internal medicine, and radiotherapy. Forty hours per week, 9:00 a.m. to 6:00 p.m., Monday to Friday, salary \$16,320 per year. Must have proof of legal authority to work permanently in the United States. Send résumés in duplicate (no calls) to: **L. Ellison, JO#1333249, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

POSTDOCTORAL POSITION available to study mechanism regulating transcription of specific genes during spermatogenesis in the mouse, with an emphasis on *in vivo* protein-DNA interactions, DNA methylation and changes in chromatin structure. This is part of an ongoing, NIH-funded study of the structure, expression and regulation of the phosphoglycerate kinase genes in mammalian spermatogenic cells in the laboratory of Dr. John McCarrey. The Southwest Foundation for Biomedical Research provides a stimulating environment in which to pursue biological research, and the city of San Antonio provides a pleasant, low-cost living experience. A Ph.D. in biology, molecular biology, or related field, is required. Interested individuals should send a brief summary of past and present research interests, curriculum vitae and names of three references to: **Personnel Manager (249), Southwest Foundation for Biomedical Research, P.O. Box 28147, San Antonio, TX 78228-0147.** *Equal Opportunity Employer, M/F.*

**THE FIFTH PRINCETON LIPOSOME CONFERENCE
THE BASICS AND THE BREAKTHROUGHS**

May 24-25, 1993

**Scanticon Conference Center
Princeton, New Jersey**

Co-Chairmen: **Marc J. Ostro, Ph.D.** (The Liposome Co., Inc.)
Gerald Weissmann, M.D. (New York University)
Pieter R. Cullis, Ph.D. (Univ. of British Columbia)

Sponsor: The Liposome Company, Inc.

The Fifth Princeton Liposome Conference, "The Basics and the Breakthroughs," will be a major international gathering of scientists active in the lipid and liposome fields. The conference will serve as a comprehensive forum for discussion of developments in these areas.

Speakers include: **Gerrit L. Scherphof**, Ph.D. (University of Groningen), **Donald Armstrong**, M.D. (Sloan-Kettering), **Marcel B. Balley**, Ph.D. (B. C. Cancer Agency), **Stephen L. Saletan**, M.D. (The Liposome Co.), **Prof. I. W. Kellaway** (University of Wales), **Sam Castlmere**, V.M.D. (Ideal Farms Equine Clinic), **Francis Szoka, Jr.**, Ph.D. (Univ. of California, SF), **A.H. Goldstone**, M.D. (Univ. College Hospital, London), **A. Kilbanov**, Ph.D. (University of Pittsburgh), **Gabriel Lopez-Berestein**, M.D. (M.D. Anderson Cancer Ctr.), **R. Jain**, M.D. (Harvard Medical School), **John Replne**, M.D. (Webb-Waring Lung Institute), **Cary A. Presant**, M.D. (University of Southern Cal), **I. J. Fidler**, M.D. (University of Texas Cancer Center), **Gerald Batlist**, M.D. (McGill University), **Leaf Huang**, Ph.D. (University of Pittsburgh), **Sinil Kim**, Ph.D. (DepoTech Corporation), **Andrew S. Janoff**, Ph.D. (The Liposome Co.), **Heiner Frost**, M.D. (CIBA-GEIGY), and **Pieter R. Cullis**, Ph.D. (Univ. of British Columbia)

Contact: **E. Templeton**, Conference Coordinator, c/o The Liposome Company, Inc., One Research Way, Princeton, NJ 08540. Telephone: 609/452-7060.

Howard Hughes Medical Institute

Practicing Safe Science

A new video...

- Reenactments of actual laboratory accidents
- Demonstrations of good safety techniques
- Questions that challenge you to recognize risks in the laboratory

...available free of charge as a service to the biomedical research community from the Howard Hughes Medical Institute

For a copy of the video, write:
Office of Laboratory Safety
Howard Hughes Medical Institute
Dept. S
6701 Rockledge Drive
Bethesda, MD 20817

WORLD AIDS FOUNDATION

The World AIDS Foundation (WAF) announces its intent to support research and education relating to AIDS in the developing world. The goal of the WAF is to facilitate information exchange and to assist developing countries to respond to the AIDS pandemic.

The Foundation is particularly interested in projects that are catalytic, and once in place could have a multiplicative effect. The WAF also is particularly interested in supporting applications that originate from developing countries and which emphasize collaboration between and among scientists from developed and developing countries. The main area of interest of the WAF is education for health professionals in developing countries especially in-country training. This includes highly focused workshops which enhance the scientific process and transfer knowledge needed in the effort against HIV infection and AIDS.

The limit of any single funding request to the Foundation is \$200,000.

Application Procedures:

Concept letter and applications may be prepared in either English or French. Applicants should submit concept letters for initial consideration. Following review of concept letters, applicants may be invited to submit complete proposals. The annual deadline for receipt of concept letters is February 1.

Concept letters and inquiries concerning the programs of the World AIDS Foundation should be directed by mail or by fax to either:

**World AIDS Foundation
Assistant Secretary for Health
c/o Director, Fogarty International Center
National Institutes of Health
Building 31, Room B2C02
9000 Rockville Pike
Bethesda, Maryland 20892 U.S.A.
Fax: (301) 402-2056**

or

**Fondation Mondiale SIDA
c/o Directeur de l'Institut Pasteur
28 rue du Docteur Roux
75724 Paris, Cedex 15 FRANCE
Fax: 0033-1-45688938**

**DEAN SEARCH
COLLEGE OF SCIENCES AND MATHEMATICS
AUBURN UNIVERSITY**

The Auburn University College of Sciences and Mathematics invites applications and nominations for the position of Dean. Auburn University is the 1862 land-grant institution located in east central Alabama. It enrolls approximately 21,500 students on the Auburn campus. The College of Sciences and Mathematics consists of the departments of Botany and Microbiology; Chemistry; Discrete and Statistical Sciences; Geology; Mathematics; Physics; and Zoology and Wildlife Sciences.

The Dean is the chief executive officer of the college and reports directly to the Provost. General responsibilities include:

- 1) provide creative leadership for teaching, research, and extension programs;
- 2) promote the academic unit, through activities including fundraising, with alumni and external groups;
- 3) effectively represent the position of the College faculty to the central administration;
- 4) continue to lead the College toward national prominence.

Qualifications include: earned doctorate in field appropriate for full professor and tenure in one of the departments in the College; excellence in research and teaching; strong administrative and leadership capability, including effective personnel management and communication skills; commitment to Affirmative Action/Equal Employment Opportunity.

Twelve-month salary is competitive and commensurate with qualifications. Employment date is negotiable, preferably beginning by 7/1/93.

A review of applications and materials will begin on March 1, 1993 and will continue until the position is filled. Applicants should submit a vita and the names of five references to:

**Dr. June Henton, Chair
Search Committee
210 Spidle Hall
Auburn University, AL 36849**

Auburn University is an Affirmative Action, Equal Opportunity Employer. Women and minorities are encouraged to apply.

Acea Pharmaceuticals, Inc.

Acea Pharmaceuticals, Inc. is a neurobiotechnology company located in Irvine, California. It currently has the following positions available.

STROKE/NEURODEGENERATION

We are seeking a Ph.D. level scientist for the Pharmacology Group. The successful candidate should have at least 2 years of postdoctoral experience in assessing potential neuroprotective agents in animal models of brain ischemia.

PHARMACOKINETICS

Scientist to develop a pharmacokinetics/drug metabolism program. The successful candidate will design, conduct, analyze and report pharmacokinetics and drug metabolism studies essential to the development and registration of new drug entities. A Ph.D. or equivalent with at least 2 years of postdoctoral training is required.

Research Associate to participate in pharmacokinetics and drug metabolism studies. B.S./M.S. with experience in pharmacokinetics required.

Send a cover letter and resume including the names and addresses of references to:

**Human Resources
Acea Pharmaceuticals, Inc.
1003 Health Sciences Road West,
Irvine, CA 92715**

Seattle, WA

ZYMOGENETICS COMPUTATIONAL CHEMIST

ZymoGenetics, a Seattle based company making important strides in the development and clinical evaluation of therapeutic products aimed at tissue repair, coagulation disorders, and diabetes is currently seeking a Computational Chemist to conduct research in our structure-based drug discovery program.

The successful candidate will possess a PhD in Biochemistry, Computational chemistry or Pharmacology and 3+ years related experience in molecular modeling, computational chemistry, and pharmacophore design. Must have ability to interact and work effectively with both computer scientists and bench chemists.

ZymoGenetics offers an exciting environment characteristic of a small research and development company, along with the scope and stability of a large pharmaceutical corporation as a subsidiary of NOVO NORDISK, the world's largest manufacturer of insulin. We also offer intellectual challenge, state-of-the-art facilities and a generous benefits package.

Please apply by sending your CV to:

**ZymoGenetics, Inc.,
Attn.: Human Resources, #12N193
4225 Roosevelt Way NE
Seattle, WA 98105**

ZymoGenetics is an
Equal Opportunity Employer

Novo Nordisk



Research Scientist Cambridge, MA

Nissan has established its new **Cambridge Basic Research** facility in **Cambridge, MA**. This new research facility will be engaged in basic science studies of factors that might improve driving skills, and driving comfort and safety.

Problems of special interest include cognitive loads, attention and search, optical flow field assessment, navigation, early recognition of dangerous situations, and strategies for improving driver and pedestrian safety. The lab has a close working relationship with faculty at MIT and Harvard, and will house a variety of experimental facilities, including several Graphics workstations.

Temporary assignments will be for 2-3 years, renewable. Ph.D. required. Level of appointment is open. **Nissan Research & Development, Inc.** is the North American automotive development arm of Nissan Motor Co., LTD. Please forward resume and salary requirements to our North American Corporate Headquarters by January 1993:

Nissan Research & Development, Inc., Human Resources-DN, P.O. Box 9200, Farmington Hills, MI 48333-9200. Equal Opportunity Employer.



**Chief, Endocrinology Service
Memorial Sloan-Kettering Cancer Center**

Memorial Sloan-Kettering Cancer Center is seeking a Chief of its Endocrinology Service in the Division of General Medicine, Department of Medicine. We encourage applications from physicians who can provide leadership for the clinical service, clinical investigation and the training of fellows. This individual will be in a unique position to collaborate with the neighboring institutions of Cornell University Medical Center and Rockefeller University. Board certification in Internal Medicine and Endocrinology required.



Please send curriculum vitae and bibliography to:

John Mendelsohn, M.D.
Chairman, Search Committee
Memorial Sloan-Kettering
Cancer Center
1275 York Avenue
New York, New York 10021

An Equal Opportunity Employer

**LUDWIG INSTITUTE
INSTITUTE SAO PAULO
CANCER BRANCH
RESEARCH LUDWIG IN
10th ANNIVERSARY**

**MEETING
ANNOUNCEMENT**

**BASIC AND APPLIED
CANCER RESEARCH**

April 1 - 3, 1993

São Paulo - Brazil

**INTERNATIONAL
SYMPOSIUM ON
HUMAN
PAPILLOMAVIRUS**

April 4 - 6, 1993

Cancer Heritage and Susceptibility; Transformation and Signaling Pathway; Tumor Immunology and Metastases; Glycobiology of the Transformed Phenotype; Etiology, Diagnosis and Epidemiology; Transformation by Human Papillomavirus; HPV and Cellular Proteins Interactions; Epidemiology of HPV Infections; Humoral and Cellular Immune Responses to HPV

**Registration
and
Abstract Deadline
March 1st., 1993**

Contact

Dr. Luisa L. Villa or Libeca M. Ward
Instituto Ludwig de Pesquisa sobre o Câncer
r. Prof. Antonio Prudente #109, 4th floor
CEP 01509-010
Phone: (011)270-4922 Fax: (011)270-7001
São Paulo SP - BRAZIL



**STANFORD UNIVERSITY
School of Medicine
Division of Cardiovascular Medicine**

POSTDOCTORAL RESEARCH FELLOWSHIPS

The Division of Cardiovascular Medicine has several postdoctoral fellowships available and 3 Training Grants to support postdoctoral research. Participating preceptors are from different Departments in the School of Medicine.

A Postdoctoral Fellowship Position is available in the laboratory of Richard Lawn, Ph.D. to conduct research on lipoprotein Lp(a) and genes involved in cardiovascular disease. Preceptor: Richard Lawn, Ph.D.

American Heart Association/Bugher Foundation Center for Molecular Biology in the Cardiovascular System, offers fellowships to highly qualified M.D. and M.D./Ph.D. graduates to train in leading molecular and cellular biology laboratories on cardiovascular related projects (only US citizens and Permanent Residents are eligible). Principal Investigator: Victor J. Dzau, M.D.

NIH Training Grant in Vascular Biology and Medicine. Fellowships available to M.D. or Ph.D. applicants to train with leading scientists in several areas of basic research, including paracrine control of vasomotor tone, autocrine-paracrine regulation of vascular growth, response to injury: restenosis, cell-cell interaction: adhesion molecule, lipoprotein and glucose metabolism, genetics of vascular disease and gene transfer and therapy (only US citizens and Permanent Residents are eligible). Principal Investigator: Victor J. Dzau, M.D.

NIH Training Grant in Cardiac and Cellular Electrophysiology. Fellowships available to M.D. or Ph.D. applicants for laboratory research training in cellular electrophysiology (only US citizens and Permanent Residents are eligible). Principal Investigator: William Clusin, M.D., Ph.D.

Interested applicants should submit a c.v. and a letter outlining background and area of research interest. Three letters of reference should be submitted directly to the Preceptor or Principal Investigator at the following address:

Division of Cardiovascular Medicine
Falk Cardiovascular Research Center
Stanford University School of Medicine
300 Pasteur Drive
Stanford, California 94305-5246

The Division of Cardiovascular Medicine is committed to increasing representation of women and minority groups, and particularly encourages applications from such candidates.

POSITIONS OPEN

PHYSIOLOGIST. The Biology Department of Birmingham-Southern College is accepting applications for a non-tenure-track but continuing position at the **ASSISTANT PROFESSOR** level. Ph.D. required. Duties include teaching introductory organismic biology, physiology, non-majors biology, and an advanced course in area of expertise. Commitment to undergraduate research is desirable. Send curriculum vitae, statement of teaching/research interests, transcripts, and three letters of recommendation to: **Dr. Jeannette Runquist, BSC A-22, Birmingham, AL 35254.** Closing date: January 31, 1993. *Equal Opportunity Employer.*

HANOVER COLLEGE DEPARTMENT OF EDUCATION

ASSOCIATE PROFESSOR (or PROFESSOR) and **CHAIR**, Department of Education, offering primary and secondary certification programs and in the midst of fundamentally rethinking teacher preparation. Hanover College seeks a person who meets one of the following three descriptions: (a) expertise and doctorate in a field of science education and substantial teaching experience on the college level; (b) expertise and doctorate in mathematics education and substantial teaching experience on the college level; (c) master's degree or doctorate in English language/literature or a field of social studies PLUS a master's degree or doctorate in education (a person with a master's degree in one field must have a doctorate in the other) and substantial teaching experience on the college level. Experience in teaching in primary and/or secondary schools highly desirable. Please send letter of application, curriculum vitae, examples of scholarly work, and at least three letters of recommendation to: **Christine Wilcox, Secretary to the Education Search Committee, Hanover College, Post Office Box 108, Hanover, IN 47243.** *Equal Opportunity/Affirmative Action Employer.*

PROFESSOR/CURATOR OF PARASITOLOGY for a joint position in the University of Nebraska State Museum (primary academic unit) and the School of Biological Sciences, University of Nebraska-Lincoln. The successful candidate will hold a Ph.D. and have an established research record of international stature in the field of modern systematic parasitology. Responsibilities for the Museum will include intellectual and managerial leadership for the Division of Parasitology which includes the internationally important collections of the Harold W. Manter Laboratory, writing of grants to support research programs and collections, establishment of a research program in modern systematic parasitology which is at least in part collection based, and participation in the Museum's public programs. Responsibilities in Biological Sciences will include participation in the graduate program and instruction of an undergraduate level course in the area of zoology and a graduate level course in an area of research interest to be offered in alternate years. The Search Committee will begin reviewing files on February 5, 1993, and continue until a suitable candidate is found. Send application, résumé, and three letters of reference to: **Chair, Parasitology Search Committee, W436 Nebraska Hall, University of Nebraska-Lincoln, Lincoln, NE 68588-0514.** For additional information call (402) 472-2614. *The University of Nebraska-Lincoln is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity and is responsive to the needs of dual career couples. We assure reasonable accommodation under the Americans with Disabilities Act; contact Christy Horn at (402) 472-9522.*

ASSOCIATE DEAN FOR BASIC SCIENCES

Loma Linda University School of Medicine is searching for an Associate Dean for Basic Sciences. We are seeking a person with an M.D. or Ph.D. degree who has extensive extramurally funded research experience. The applicant must have a knowledge of federal and state funding agencies and must have the ability to stimulate collaborative research between basic science and clinical departments. Responsibilities include allocation of space, equipment, and financial resources needed for research. Interested and qualified individuals should call (909) 824-4481 for more information or send curriculum vitae to: **A. Douglas Will, M.D., Dean, Loma Linda University School of Medicine, Loma Linda, CA 92350.** *Loma Linda University is a religiously qualified Equal Opportunity Employer.*

POSITIONS OPEN

DEAN COLLEGE OF ARTS AND SCIENCES UNIVERSITY OF NEW MEXICO

Applications and nominations are invited by January 29, 1993. Contact: **Tom Dodson, College of Fine Arts, University of New Mexico, Albuquerque, NM 87131-1396.** Telephone: 505/277-2111, FAX: 505/277-0708

DIRECTOR, Bone Marrow Transplantation Program. Tulane University School of Medicine and Tulane Cancer Center are seeking applicants at the Associate Professor/Professor level to lead the research and clinical program in Bone Marrow Transplantation. Candidates are expected to have an established, funded research program in clinical and/or experimental transplantation biology and be capable of developing and managing the research and clinical aspects of the program with the Sections of Pediatric and Medical Hematology/Oncology. Candidates must be Board Certified in either Pediatrics or Medicine and have at least three years of experience in a bone marrow transplant unit accredited by the National Marrow Donor Program. An attractive package of salary and development resources is available. Research space in the new Cancer Center will be ready for occupancy in June of 1993. Interested applicants should send curriculum vitae and names of three references to: **James J. Corrigan, Jr., M.D., Vice Dean, Tulane University Medical Center, 1430 Tulane Avenue, New Orleans, LA 70112-2699.** Applications will be accepted until position filled. *Affirmative Action/Equal Opportunity Employer.*

MOLECULAR BIOLOGIST

The Department of Otolaryngology and the Cancer Center are seeking a Molecular Biologist with solid and productive experience in Head and Neck Cancer/Molecular Biology Research.

Applicants will develop their research programs and establish grants. Salary and Academic Rank are dependent on the candidate's background.

Please forward curriculum vitae to:

**Nabil Fuleihan, M.D.
Associate Professor and Chairman
Department of Otolaryngology
Boston University School of Medicine
80 East Concord Street
Boston, MA 02118**

TECHNICAL STAFF (RESEARCH CHEMIST), for manufacturer in the Cincinnati area. Conduct research and develop analytical methods to support new drug and cosmetic product initiatives. Explore the methods for in-vivo and in-situ analysis using fiber-optic chemical sensors. Participate with project teams to evaluate the efficacy of new ingredients by utilizing a variety of spectroscopic (UV-Vis, fluorescence, atomic spectroscopy and image analysis) and chromatographic techniques. Improve analytical sensitivity and develop trace analysis methods to assess the skin penetration and deposition of active ingredients. Provide analytical support for implementing on-line process monitoring and solving quality assurance problems. Ph.D. in Analytical Chemistry required plus one year of experience in job offered or one year of experience as a Pre or postdoctoral researcher in the design of fiber-optic chemical sensors for the analysis of organic and inorganic compounds. One year of experience must involve the utilization of NIR (Near Infrared) spectroscopy for the characterization of polymers, the use of principal component analysis techniques for data analysis, applications of atomic spectroscopic methods on chromatography, use of charge-coupled devices (CCD) for image analysis and ultraviolet and visible spectral studies.

Forty hours per week, 9:00 to 5:00. Salary: \$49,000 per year. *Must have proof of legal authority to work indefinitely in United States.* Send résumé in duplicate (no calls) to: **L. Ellison, JO#1230887, Ohio Bureau of Employment Services, P. O. Box 1618, Columbus OH 43216.**

SCIENCE welcomes placement of line classified ads by FAX. Please include name and telephone number for our confirmation call when transmitting ad to:

FAX NUMBER: 202-682-0816

POSITIONS OPEN

RESEARCH FACULTY POSITIONS BIOLOGICAL PSYCHIATRY

The Department of Psychiatry and Human Behavior at the University of Mississippi Medical Center invites applications to fill several tenure-track research positions for its newly established laboratories. Candidates should hold a M.D. or Ph.D. with at least two years of postdoctoral experience in one or more of the following areas: molecular biology, receptor binding, receptor cloning, brain imaging, molecular genetics, neuropsychopharmacology, microdialysis. Prior research with biogenic amines, neuropeptides and psychotropic drugs is highly desirable. Candidates should have demonstrated ability to develop research programs and to compete successfully for extramural funding. Joint appointments to basic science departments are possible. Teaching responsibilities are not excessive. Faculty rank and salary commensurate with degree and level of experience. Applicants should send curriculum vitae, an outline of research interests and the names of three individuals who have agreed to provide letters of recommendation to: **Dr. Norman C. Nelson, Vice Chancellor and Dean, The University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505.** Applications will be accepted through April 1, 1993. *Equal Opportunity Employer, M/F/D/V.*

FACULTY, CLINICAL HEMATOLOGIST AND IMMUNOHEMATOLOGIST/ IMMUNOGENETICIST

Michigan State University (MSU) invites applications for two tenure-track, academic year, faculty positions in the Medical Technology Program. The successful candidates must have a Ph.D., nationally recognized certification in the appropriate area, clinical experience and demonstrated evidence of the ability to establish active research programs. A strong commitment to teaching at both the undergraduate and graduate levels is expected. The immunohematologist/immunogeneticist must be eligible for certification as a Histocompatibility Laboratory Director; preference will be given to candidates with experience in tissue typing immunology, molecular definition of major histocompatibility complex and individual identification using molecular methods. Review of applications will begin March 1, 1993. Send curriculum vitae and names of four references to: **Dr. Douglas W. Estry, Medical Technology Program, E-37 McDonell Hall, East Lansing, MI 48825.** *MSU is an Equal Opportunity/Affirmative Action Educator and Employer; minority and women applicants are encouraged to apply.*

ANATOMY AND PHYSIOLOGY POSITION. The Ashland University Department of Biology/Toxicology seeks to fill a **TENURE-TRACK FACULTY POSITION.** Teaching responsibilities include courses in anatomy, physiology, embryology, histology and a non-majors course. Rank and salary commensurate with experience. Applicants should submit curriculum vitae, copies of transcripts, statement of teaching philosophy and research interests, and three reference letters by February 15, 1993 to: **Dr. Duncan R. Jamieson, Dean, School of Sciences, Ashland University, Ashland, OH 44805.** *Affirmative Action/Equal Opportunity Employer.*

MOLECULAR-CELLULAR PHARMACOLOGY. TENURE-TRACK POSITIONS at the University of Texas Health Science Center at Houston, for outstanding individuals studying molecular mechanisms underlying cell regulation by drugs, hormones, neurotransmitters, growth factors, toxic substances, etc. Primary responsibility will be the conduct of internationally recognized research, with some professional and/or graduate teaching. We are primarily seeking assistant professors, but senior appointments may be possible for established individuals. Positions are located in the Texas Medical Center, an exciting environment that includes six schools of the University of Texas System, Baylor College of Medicine, and the M. D. Anderson Cancer Center. Send applications (including curriculum vitae, research plans, and names, addresses, and telephone numbers of 4 references) to: **Dr. Victoria Knutson, Department Pharmacology, University of Texas Medical School at Houston, P.O. Box 20708, Houston, TX 77225,** by February 28, 1993. *The University of Texas is an Equal Opportunity Employer. Women and Minorities are encouraged to apply.*

Alcohol Metabolism Fellowship.

The Unit of Pharmacokinetic Studies, Laboratory of Clinical Studies, invites qualified individuals to apply for a postdoctoral fellowship to study the effects of ethanol withdrawal on drug-metabolizing enzymes. Basic studies of enzyme activity and clinical studies involving altered pharmacokinetics of therapeutic agents are ongoing. A background in biochemistry or pharmacology and experience with *in vitro* enzyme assays and/or HPLC is preferred.

Individuals with less than five years postdoctoral experience may apply by submitting a *curriculum vitae*, three letters of reference and a statement of research interests to Ms. Kathleen Hanratty, Personnel Management Branch.

National Institute On Alcohol Abuse And Alcoholism

National Institutes Of Health
Building 31, Room 1B58, 9000 Rockville Pike Bethesda, MD 20892
Equal Opportunity Employer

B E C T O N D I C K I N S O N

SCIENTIST Molecular Biology

Becton Dickinson Research Center is expanding its corporate program in the development of DNA probe-based technology for diagnostic applications. Innovative and highly-motivated scientists are invited to submit an application to join a multi-disciplinary team of investigators working on novel nucleic acid amplification technologies.

Positions are available for Ph.D.-level scientists (two positions) to join our amplification development group. You will be involved in the development of improved nucleic acid amplification systems based upon novel enzymatic methods.

The successful candidate must have a doctorate degree in biochemistry or molecular biology with at least two years of postdoctoral experience in the area of restriction enzyme characterization, DNA polymerases or nucleic acid replication enzymology with a published record of accomplishment.

For immediate consideration, please send your resume to: **Human Resources, Becton Dickinson & Company Research Center, 21 Davis Drive, Research Triangle Park, NC 27709.** AA/EEO Employer.

**BECTON
DICKINSON**

THE REWARDS OF DISCOVERY

RESEARCH OPPORTUNITIES

Saint Francis Hospital and Medical Center, located in Hartford, Connecticut, is seeking candidates to join our NIH-supported Bone Biology Laboratory, to work on molecular and cellular biology of the bone.

RESEARCH SCIENTIST

Candidates should have completed a doctoral degree and a postdoctoral fellowship, with prior molecular and cellular biology experience. Candidates will be eligible for an appointment at the University of Connecticut School of Medicine.

POST-DOCTORAL FELLOW

Candidates should have completed a doctoral degree. Interested candidates should send a resume and references to: **Dr. Ernesto Canalis, Director, Department of Research, Saint Francis Hospital and Medical Center, 114 Woodland Street, Hartford, CT 06105-1299.**



SAINT FRANCIS

Hospital and Medical Center
114 Woodland Street
Hartford, Connecticut 06105-1299

*The Science of Medicine—
The Art of Caring*

FOR A FURTHER
The employment listing

Biotechnology Staff Scientist

Affymax Research Institute is an innovative venture dedicated to the development of new technology which will accelerate the process of drug discovery. Affymax offers a creative and stimulating environment for talented people.

Affymax has an opening for a scientist to use biological peptide libraries to identify the epitopes of human antibodies. A doctoral degree and one to three years of postdoctoral experience are required. Experience with molecular biological, immunochemical, microbiological, or biochemical techniques is required. Experience with handling human serum samples is required. Experience in the development of ELISA and other diagnostic tests is encouraged.

If you would like to join our fast growing company, send your resume to: **Affymax Research Institute, Job Code PS86, Human Resources Department, 4001 Miranda Avenue, Palo Alto, California 94304.** EOE.

affymax



POSITIONS OPEN

SIGMA XI, The Scientific Research Society DIRECTOR OF MEMBERSHIP

A senior position at the Society's headquarters in Research Triangle Park, North Carolina, the Director is responsible for working with the Membership Committee to develop and implement policies dealing with the Society's 100,000 members, who are primarily Ph.D.-level research scientists and engineers. Sigma Xi membership is by invitation only. The Director manages a staff of four who handle the day-to-day work. The Director is responsible for analyzing trends, identifying problems, and proposing solutions for issues regarding membership satisfaction, retention, and selection. Extensive marketing experience in technical areas or experience as a membership director or in a senior membership position for a technical society or association is required. A master's degree or equivalent experience in a technical or scientific field, including social sciences, is desired. Send résumé with cover letter and salary requirements to: **Director of Administration, P.O. Box 13975, Research Triangle Park, NC 27709.** Deadline for résumés is January 31, 1993. *Sigma Xi is an Equal Opportunity Employer.*

FACULTY POSITION IN PHARMACOLOGY/TOXICOLOGY, WAYNE STATE UNIVERSITY, COLLEGE OF PHARMACY AND ALLIED HEALTH PROFESSIONS, DEPARTMENT OF PHARMACEUTICAL SCIENCES. The Department of Pharmaceutical Sciences is seeking candidates for a tenure-track position available immediately in pharmacology/toxicology with focus on neuropharmacology/toxicology, behavioral pharmacology/toxicology, or immunopharmacology/toxicology. Persons with demonstrated expertise in applied biotechnology are especially urged to apply. Candidates will be expected to establish an active graduate research program in their respective areas and vigorously pursue the support of such programs through extramural funding. Teaching at both the graduate and undergraduate levels is also expected. Applicants should possess a Ph.D. degree in pharmacology, toxicology, immunology, or related disciplines and have postdoctoral experience. *Eligibility is limited to U.S. citizens and permanent residents.* Rank and salary commensurate with experience. Interested persons should send curriculum vitae, a description of research interests, and the names of three references to: **Dr. Hanley N. Abramson, Chair, Department of Pharmaceutical Sciences, College of Pharmacy and Allied Health Professions, 528 Shaper Hall, Detroit, MI 48202.** *Wayne State University is an Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.*

INORGANIC CHEMISTRY—AMHERST COLLEGE. A full-time tenured or tenure-track **FACULTY POSITION** is available for a Ph.D. inorganic chemist beginning in July, 1993. The rank for this position is open, although applications at the assistant professor level are preferred. The successful candidate will be expected to teach introductory chemistry as well as inorganic chemistry at the advanced undergraduate level, and will have the opportunity to participate in interdisciplinary teaching. She/he will also be expected to establish a vigorous research program in which undergraduates can substantively participate. Applicants should submit detailed curriculum vitae, a description of their teaching and research plans, and the names of three references to: **Dr. J. N. Kushick, Chairman, Department of Chemistry, Amherst College, Amherst, MA 01002,** by February 1, 1993, and should arrange to have their letters of reference sent to the same address. *Amherst College is an Affirmative Action/Equal Opportunity Employer and especially welcomes applications from women, minority, and disabled candidates.*

POSTDOCTORAL POSITION

Molecular Biologist/Biochemist to study the intracellular assembly of glycosylated phospholipid anchor structures and defects in human disease; expression cloning of genes, transcriptional regulation, and chemical analyses of intermediates. Contact: **Beth McCarty, Institute of Pathology, Case Western Reserve University, 2085 Adelbert Road, Cleveland, OH 44106.** *An Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

FACULTY POSITION GENERAL/ANALYTICAL CHEMISTRY WEST VIRGINIA STATE COLLEGE

Applications are invited from persons holding a Ph.D. degree in Analytical Chemistry for a full-time, tenure-track position in an ACS-approved Chemistry Department of a four-year state college. A strong commitment to excellence in teaching is mandatory and a background in NMR and FT-IR spectroscopy and HPLC is required. The department offers four-year B.S. in Chemistry and two-year A.A.S. in Chemical Technology degrees. Responsibilities include teaching general chemistry lecture and lab courses for non-science and science majors, quantitative analysis, and instrumental analysis lecture and lab for chemical technology and chemistry majors. Position begins August 16, 1993. Salary and rank negotiable. Excellent benefit package.

West Virginia State College is a historically black college which has evolved into a fully accessible, racially diverse, and multi-generational institution. It is the largest institution of higher education in the Charleston, WV metropolitan area, with an annual enrollment of approximately 5,000 students. *West Virginia State College is an Affirmative Action/Equal Opportunity Employer and actively solicits applications from women and minorities.*

Send application letter, résumé, statement of teaching and research philosophy, official undergraduate and graduate transcripts, and three letters of recommendation by March 1, 1993 to:

**Dr. Barbara J. Oden
Vice President for Academic Affairs
West Virginia State College
P.O. Box 1000
Institute, WV 25112-1000**

MICROBIOLOGY AND IMMUNOLOGY

The Department of Microbiology and Immunology of the University of Oklahoma Health Sciences Center invites applications for two **TENURE-TRACK POSITIONS** with a preferred interest in the areas of:

**Virology
Immunology
Molecular Pathogenesis**

Candidates with postdoctoral experience, as well as more senior scientists will be considered; rank will depend on the qualifications of the successful applicant. The applicant should have demonstrated excellence in conducting independent research and be able to compete for extramural research support. Academic responsibilities will include participation in the instruction of medical, dental, and graduate students.

The position will provide excellent opportunities for conducting basic biomedical research in a department of 12 faculty members and 31 adjunct members, with a strong emphasis on the molecular genetics and immunology of infectious agents. In addition, opportunities exist for interaction within the newly created Center for Molecular Medicine. Ample start-up funds will be provided.

Please send curriculum vitae, a brief statement of research interest, copies of representative publications and the names of three references to:

**Dr. Richard E. Lloyd
Department of Microbiology and Immunology
University of Oklahoma Health Sciences Center
Oklahoma City, OK 73190**

The University of Oklahoma Health Sciences Center is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS at Savannah River Technology Center, Aiken, South Carolina, to investigate projects on subsurface microbial ecology, bioremediation, environmental biotechnology, and environmental monitoring. Emphasis will be placed on developing and applying new technologies for characterization of microorganisms in subsurface sediments and ground water and their response to environmental perturbations. Experience in microbial ecology, molecular biology, bioremediation or environmental microbiology is required. Degree within last 3 years required as is *U.S. citizenship or PRA status*. For application material: **Postgraduate Research Program/SRTC, Science/Engineering Education Division, Oak Ridge Institute for Science and Education, P.O. Box 117, Oak Ridge, TN 37831-0117, Telephone: (615) 576-3456.**

POSITIONS OPEN

POSTDOCTORAL POSITION available to characterize the invasive and metastatic phenotype of cancer cells, particularly growth factor and cytokine involvement. Experience in protein biochemistry, cell biology, and growth factor research required. Experience in tumor biology, and cytokine research desirable. Interested individuals should send curriculum vitae and names of three references to: **Dr. Gary G. Meadows, College of Pharmacy, Washington State University (WSU), Pullman, WA 99164-6510.** *WSU is an Equal Opportunity/Affirmative Action Employer.* Application Deadline is January 29, 1993.

POSTDOCTORAL ASSOCIATE. Full-time position available in the laboratory of Dr. Anil Kumar Jaiswal in the Department of Pharmacology. Individual will participate in research involving the identification and cloning of iso-enzymic forms of NAD(P)H: Quinone Oxidoreductase. Ph.D. with less than 2 years of research experience required; previous experience in protein production preferred. Send résumé to: **A.J. c/o Personnel Department, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111.** *Equal Opportunity Employer.*

TWO POSTDOCTORAL POSITIONS—HUMAN MOLECULAR GENETICS. Available January 1, 1993. **Position 1**—Analysis of spontaneous germline and somatic mutation in humans, mice, and other animals. **Recent review:** Steve S. Sommer, "Assessing the underlying pattern of human germline mutations: lessons from the factor IX gene," *FASEB J.* 6:2767, 1992. **Position 2**—Genetic predisposition to schizophrenia using a non-linkage-based approach. **Recent review:** Sobell et al., "Delineation of genetic predisposition to multifactorial disease; a general approach on the threshold of feasibility," *Genomics* 12:1-6, 1992. This position may involve analysis of candidate genes of the dopamine pathway or the development of novel PCR-based methodology to facilitate the analysis (**recent methodology:** Sarkar et al., *Genomics* 13:441, 1992; *Sommer et al., BioTechniques* 12:82, 1992). Applicants should submit curriculum vitae, selected reprints, and names of three references to: **Steve S. Sommer, M.D., Ph.D., Department of Biochemistry and Molecular Biology, Mayo Clinic/Foundation School of Medicine, Rochester, MN 55905.** *Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.*

POSTDOCTORAL POSITIONS IN MOLECULAR EVOLUTION

Two postdoctoral positions in molecular evolution and systematics are available at Louisiana State University. Successful candidates will work in the laboratory of one or more of the following investigators: M. Blackwell (Fungus-Insect Associations), R. L. Chapman (Phylogeny/Bryology), D. W. Foltz (Population Genetics), D. A. Good (Herpetology), M. S. Hafner (Host-Parasite Coevolution), D. P. Pashley (Insect-Plant Interactions), M. Stine (Forest Genetics), and L. E. Urbatsch (Vascular Plant Systematics). A research stipend accompanies position. Completion of requirements for Ph.D. necessary for employment; employment will initiate after 1 April 1993. Interested persons should write: **Dr. Robert M. Zink, Museum of Natural Science, Louisiana State University, Baton Rouge, LA 70803,** to receive application information. Applications will be accepted until 1 March 1993, or until suitable candidates are identified. *An Equal Opportunity/Affirmative Action Employer.*

MOLECULAR CHAPERONES

Three-year **POSTDOCTORAL POSITION** is available to study roles of chaperones in protein folding, assembly, and translocation. Structure and function of 70K stress proteins emphasized. Ph.D. in biochemistry or related field required. Send curriculum vitae, reprints, and three letters of reference to: **Dr. William J. Chirico, Department of Anatomy and Cell Biology, Box 5, State University of New York—Health Science Center at Brooklyn, 450 Clarkson Avenue, Brooklyn, NY 11203.** *Equal Opportunity/Affirmative Action Employer.* DMC# CR0400.

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

**NATIONAL RESEARCH COUNCIL
NATIONAL ACADEMY OF SCIENCES
1993/1994 SCIENTIFIC
GRANT PROGRAMS**

The Office for Central Europe and Eurasia, of the National Research Council, invites applications from American specialists seeking opportunities to collaborate with colleagues from Central/Eastern Europe (CEE) and the Former Soviet Union (FSU) in 1993-94. The following grant programs are available:

- Cooperation in Applied Science and Technology (CAST): For American specialists wishing to host colleagues from the Newly Independent States (NIS) of the FSU for one academic year. CAST is intended to assist NIS specialists who have been involved in defense related research apply their skills to civilian activities. Application deadline: March 1, 1993
- Collaboration in Basic Science and Engineering (COBASE): Short-term project development and long-term grants for American specialists who wish to host or visit their colleagues from CEE and the FSU. Application deadline: February 28 and June 25, 1993
- Radioactive Waste Management Program: Long-term research grants for American specialists who wish to host their FSU colleague for 6 to 9 months for research on managing radioactive waste. Application deadline: February 28, 1993

Address inquiries to: **Office for Central Europe and Eurasia, National Academy of Sciences, 2101 Constitution Avenue, N.W., Washington, DC 20418 Telephone: 202-334-3680 FAX: 202-334-2614, E-mail: OCEE@NAS.EDU**



**INTERNATIONAL ASSOCIATION OF BIOLOGICAL STANDARDIZATION
INTERNATIONAL SYMPOSIUM**

RECOMBINANT VECTORS IN VACCINE DEVELOPMENT

Cultural Education Center—Albany, New York (USA)

May 23-26, 1993

Co-sponsored by

USDA/APHIS

NIAID/NIH

FDA



Scientific Committee: Fred Brown (USDA/NAAP/ADC), Roy Curtis III (Washington University), David Espeseth (USDA/APHIS/BBEP), Cyril Gay (USDA/APHIS/BBEP), Daniel Gaudry (Rhône Merieux), Enzo Paoletti (Virogenetics Corporation), Dale Spriggs (NIAID/NIH).

The purpose of this symposium is to stimulate the use of recombinant vectors in the development of new vaccines; more specifically, to bridge a path between academic institutions and the biological industry, so that academic research can be funneled into development of "real" vaccines that will benefit both human and animal health.

Scientists representing academic institutions, regulatory agencies and industry will participate, including:

Gordon Ada
Kenneth J. Bart
Robert Chanock
Thomas Cloutier
Alan Davis
Philip Desmetre
Gordon Dougan
Brigitte Gicquel
Joseph Glorioso

Tore Godal
William Jacobs, Jr.
Graham Hatfull
Maurice Hilleman
Florian Horaud
Stephen H. Hughes
Claude LeClerc
Carol Markus-Sekura
Janis McMillen

Bernard Moss
Michel Pericaudet
Florian Schodel
Maggie So
C. Kendall Stover
James Tartaglia
Jill Taylor
Tilahun Yilma
Rolf Zinkernagel

Contact: **Kathleen Cavanagh, Symposium Coordinator, Nucleic Acid Technologies Foundation, Wadsworth Center for Laboratories and Research, P.O. Box 509, Albany, New York 12201-0509 USA
TELEPHONE: 518-474-7760 FAX: 518-474-3439**

**POSTDOCTORAL FELLOW/
POSTDOCTORAL ASSOCIATE
POSITIONS**

**CENTER FOR GENE THERAPY
BAYLOR COLLEGE OF MEDICINE**

Postdoctoral/Postdoctoral Associate positions are available in the Center for Gene Therapy at Baylor College of Medicine. The Project areas include 1) recombinant viral vectors and DNA-based vectors for somatic gene delivery in animal models; 2) Gene Therapy for metabolic deficiencies, cardiovascular disorders, infectious diseases and cancer. Salary is commensurate with research experience, and Baylor is an equal opportunity employer.

Applicants must have a Ph.D. and/or M.D. degree. Applications should be sent with updated curriculum vitae to:

Dr. Savio L.C. Woo
Director,
Center for Gene Therapy
Baylor College of Medicine
1 Baylor Plaza, Room T721
Houston, Texas 77030

Wyeth-Ayerst Research

We're building on our success

Wyeth-Ayerst Laboratories is a Division of Fortune 100 American Home Products Corporation, a leading manufacturer and marketer of health care products with multi-billion dollar annual sales and an impressive record of growth and profitability.

As a GLOBAL, research-based pharmaceutical company, we are committed to helping people lead healthier lives through innovative pharmaceutical and nutritional products. It is from this commitment and position of strength that we move forward with a major expansion of our research and development activities.

RESEARCH SCIENTISTS – Microbiology Research

Participate in development of drugs against viral diseases and of new models for such diseases. Experience in antiviral drug development required. Direct experience with human papillomaviruses beneficial but not required. Ph.D. in the appropriate scientific discipline (Pharmacology, Biology, Microbiology, Biochemistry) with a minimum of 3 years related laboratory experience.

SENIOR MICROBIOLOGISTS

Participate in the development of drugs against viral diseases and of new models for such diseases. Ideal candidates will have solid experience in basic techniques used in virology, pharmacology, tissue culture, or molecular biology and in vivo models of viral diseases. These positions require a B.S./M.S. in the appropriate scientific discipline (Molecular Biology, Biology, Microbiology, Biochemistry) with 4-5 years related laboratory experience. Experience in in vitro and in vivo papillomavirus models desired.

Wyeth-Ayerst offers an attractive salary, comprehensive benefits package and opportunities for advancement for the right candidate. For immediate consideration, forward your resume and salary history/requirements to: **Wyeth-Ayerst Research Personnel, Dept. SG, P.O. Box 8299, Philadelphia, PA 19101-0082.** Equal Opportunity Employer, M/F/D/V responses encouraged.

**WYETH
AYERST**

Leading The Way for a Healthier World

IRRI

INTERNATIONAL RICE RESEARCH INSTITUTE

POSITION ANNOUNCEMENT

FOR Agronomist

The International Rice Research Institute (IRRI) is seeking a highly motivated, dynamic and creative agronomist to join its research team in Lao PDR.

The Institute

IRRI is a renowned center for research excellence dedicated to improving the well-being of present and future generations of rice farmers and consumers, particularly those with low income. IRRI seeks to generate and disseminate rice-related knowledge and technology that is environmentally, socially, and economically sound.

The Institute is one of the 16 international agricultural research centers of the Consultative Group on International Agricultural Research (CGIAR). The research and administrative headquarters of this non-profit, autonomous organization are at Los Baños, Philippines. Outreach scientists are posted in 12 countries of Asia, Africa, and Latin America. IRRI scientists actively collaborate with national programs to develop more productive and sustainable rice technology.

The Position

The agronomist will collaborate with Lao scientists in the design, implementation, and analysis of on-station and on-farm experiments for lowland rice-based farming systems, to develop more productive yet sustainable farming systems with emphasis on improved soil fertility and crop management. In addition, the agronomist will oversee rice varietal improvement. Effective linkages with extension and development programs in Lao PDR will be developed and maintained. The successful candidate will also help develop in-country training programs in agronomic research.

The position is based in Vientiane but requires regular travel throughout the country.

The Qualifications

The successful applicant should have a Ph.D. in agronomy, soil science or a related discipline and have a minimum of 5 years experience in developing and leading agronomic research programs in rainfed rice. Research experience in S.E. Asia is desirable. The candidate must have the ability to work within a multidisciplinary and multicultural team, and with national program scientists. Fluency in English is required; a knowledge of Lao or Thai would be advantageous.

IRRI provides a gender sensitive work environment and particularly welcomes women applicants.

Salary and Benefits

The salary and perquisites for the position are commensurate to qualifications and are internationally competitive.

The Application

Applications will be accepted until 15 January 1993 or until a successful candidate has been identified. Submit curriculum vitae, date of availability and names (with fax or telex addresses) of three references to:

Dr. Klaus Lampe, Director General
International Rice Research Institute
P.O. Box 933, 1099 Manila, Philippines
Fax: 63-2-818-2087; Telex: (ITT) 45365 RICE PM
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University of Minnesota Department of Physiology Announces the Maurice Visscher Land Grant Chair in Physiology

The Department of Physiology is accepting applications for the Visscher Chair in Physiology, established to honor Maurice Visscher, former Head of Physiology at Minnesota (1936-1968) and to promote further excellence in research and teaching in the Department. We are seeking applications from established investigators at the ASSOCIATE or FULL PROFESSOR level who have achieved international recognition for their research. Degree requirements: Ph.D., M.D., or foreign equivalent. We also welcome nominations. We will place special emphasis on applicants with strong research programs in cell and molecular physiology, particular those which fall within the broad, traditional subdisciplines of cardiovascular, neuroscience, renal and the cell and molecular mechanisms of transport, ion channel function, transduction and transcellular communication. This endowed chair is associated with a 12 month, tenured faculty position at a rank and salary commensurate with the experience of the individual. Endowment income can be used to enhance the research mission of the laboratory. Affiliation with Departmental and University-wide interdisciplinary graduate programs is expected.

Applicants should submit curriculum vitae, brief statement of their current research and future research directions and two recent reprints. In addition, we ask for the names of three persons to be contacted, with permission, at a later date for references.

Send material or nominations to:

Dr. Richard Poppele
Professor of Physiology
University of Minnesota Medical School
6-255 Millard Hall
435 Delaware Street, S.E.
Minneapolis, MN 55455

Deadline for Applications is March 1, 1993.

*The University of Minnesota is an
Equal Opportunity Educator and Employer*



**Associated
Western
Universities
Incorporated**

CAREER OPPORTUNITIES IN SCIENCE EDUCATION

Associated Western Universities, Inc. (AWU), a consortium of 44 universities, has been a contractor to the Federal energy agency for 30 years. AWU is a leader in the development and administration of science and engineering education programs on behalf of the U.S. Department of Energy (DOE). These programs provide support for faculty and students from high schools, colleges, and universities to participate in research at more than 40 DOE-funded laboratories. AWU is located in the residential community of Holladay in southeast Salt Lake City. The city offers a diversity of cultural and other leisure activities, and the state is renowned for its opportunities for year-around outdoor recreation.

To support its continuing growth, AWU is seeking creative individuals to fill two leadership positions. Applications are invited for:

Program Manager—Precollege Program Manager—Underrepresented Groups.

Responsibilities. Manage national and site-specific science education programs; interface with program partners; evaluate and analyze programs; conceive, plan, and develop new programs; participate actively as a member of the AWU team.

Qualifications. Bachelor's degree (advanced degree preferred), with strong background in science and engineering; excellent communication, interpersonal, organizational skills; experience in education and/or administration of sponsored programs desired.

Salary commensurate with qualifications and experience; excellent benefits. To ensure consideration, applications should be received by January 31, 1993. Send letter of application, salary requirements, resume, and the names, addresses, and telephone numbers of three references to: **Dr. R. Norman Orava, Deputy Director, Associated Western Universities, Inc., 4190 S. Highland Dr., Suite 211, Salt Lake City, UT 84124.**

**DEPARTMENT OF MICROBIOLOGY
UNIVERSITY OF SASKATCHEWAN**

Applications are invited from academically oriented research scientists for a tenure track Assistant Professor position in the Department of Microbiology at the College of Medicine, University of Saskatchewan, Saskatoon. Applicants should have a Ph.D. or M.D. degree, at least two years of postdoctoral experience and an interest in developing an independent research program in a broadly based academic environment. Medical bacteriologists interested in an academic career, including responsibilities for management of a clinical bacteriology laboratory are also invited to apply. The department has 13 faculty, including members of the Clinical Microbiology Department in the Royal University Hospital. Currently, 16 students are enrolled in M.Sc. and Ph.D. graduate degree programs in the department. Research interests in the department include diverse aspects of both basic and clinical microbiology, with a special emphasis in microbial pathogenesis, immunology, microbial genetics and bacterial physiology. Collaboration with existing research programs in the department will be strongly encouraged.

An application letter together with curriculum vitae, names of three references and a statement of research interests should be sent by April 15, 1993 to:

Dr. L.F. Qualliere
Head, Department of Microbiology
Health Sciences Building
University of Saskatchewan
Saskatoon, Sask. S7N 0W0

The University of Saskatchewan is committed to the principles of employment equity.

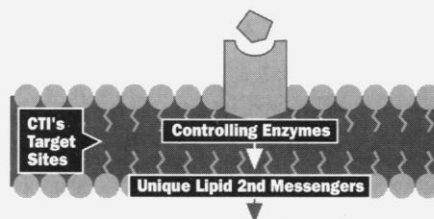
In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents.

DIRECTOR

CANCER BIOLOGY

Discovering New Avenues for Pharmaceutical Therapy...

Cell Therapeutics, Inc. is an innovative biopharmaceutical company developing novel small molecule inhibitors of signal transduction pathways. Our discoveries represent breakthrough therapies for a variety of significant human diseases.



We invite you to consider this opportunity to be responsible for establishing a comprehensive program for the preclinical development of novel anti-cancer therapeutics that inhibit oncogene-mediated cellular events and become an active participant in later phases of drug development. You will be 3 or more years from a post-doctoral fellowship, have expertise in the molecular and cellular biology of oncogenes and have experience in the drug industry. Experience with anti-cancer drug screening models and transgenic models preferred.

CTI is located in downtown Seattle, with views of Puget Sound and the Olympic Mountains. We offer an attractive compensation and benefits package, plus an environment where you can make a significant contribution to medical technology. For consideration, send or fax your C.V. to: Human Resources - Ref. #110, Cell Therapeutics, Inc., 201 Elliott Avenue West, Suite 400, Seattle, WA 98119. FAX: (206) 284-6206. Equal Opportunity Employer.



CTI
CELL THERAPEUTICS, INC.

The University of Pittsburgh Medical Center (UPMC) and the Pittsburgh Cancer Institute are seeking applicants for new FACULTY POSITIONS in the areas of molecular biology and immunology of human brain tumors. By close cooperation between the Department of Neurosurgery and the Pittsburgh Cancer Institute, a major Brain Tumor Research Program is being developed. Dr. Paul Kornblith from Neurosurgery and Dr. Mark Gilbert from Neuro-Oncology are Co-directors of the Clinical Neuro-Oncology Program. The individual recruited for this research position will be able to focus on their own individual area and have the opportunity to train graduate students, as well as participating in basic molecular biological and/or immunology research in the brain tumor field. Faculty appointment, at the Assistant or Associate Professor level, jointly in clinical and basic science department is available. Salary will be in the \$40,000 to \$75,000 range commensurate with background and training. Successful applicants will be given laboratory space in the new Biomedical Science Tower of the UPMC, start-up equipment and other support. In order to ensure full consideration, applications must be received by February 26, 1993.

To obtain more information and to submit an application, write to Ronald B. Herberman, M.D., Chairman of Search Committee and Director of the Pittsburgh Cancer Institute, 200 Meyran Avenue, Pittsburgh, PA 15213; telephone: (412) 647-8586.

The University of Pittsburgh is an Affirmative Action, Equal Opportunity Employer.

■ Population Biologist ■

Assistant Professor, tenure-track position available 9/93 in population dynamics or systematics, to teach undergraduate courses and a course in a new Environmental Biology doctoral track. PhD, ability to attract external funding, and strong research credentials required in either demographic or genetic models of populations, metapopulations, host-pathogen interactions or plant-herbivore systems, or the application of molecular and/or quantitative approaches to systematic problems. Post-doctoral experience and interest in conservation and biodiversity preferred. Send letter stating interests and goals in research and teaching, CV, and three reference letters to **Chair, Biology Search Committee, Biology Department, UMass-Boston, 100 Morrissey Blvd., Boston, MA 02125-3393**. Applications received by January 30, 1993 will receive priority consideration. An Affirmative Action, Equal Opportunity, Title IX employer. Women and minorities are especially encouraged to apply.

**University of Massachusetts
Boston**

Advancement in Science Begins at Bio-Rad Laboratories

Bio-Rad Laboratories is a world leader in clinical diagnostics and one of the fastest growing companies in California. Continued growth has created several opportunities in major U.S. cities for talented scientists who wish to begin their careers in industry as a:

Diagnostics Sales Representative

You will serve in a highly visible position with excellent opportunities for growth and advancement. Career paths include sales and product management leading to general management.

We require a BS or equivalent in a Life Science (PhD, MBA or MS a plus). Successful candidates must be willing to relocate.

We offer a competitive compensation package. Please send your resume to: Bio-Rad Laboratories, Dept. 531, 4000 Alfred Nobel Dr., Hercules, CA 94547. An Equal Opportunity Employer, M/F/D/V.

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POSITIONS OPEN

POSTDOCTORAL POSITION available immediately to work on NIH-funded grant to study mucosal immunity as related to enhancement of the immunogenicity of enteric viral vaccines and recombinant proteins in a pig challenge model. Experience in immunology is required with training in molecular virology desirable. Send curriculum vitae and 3 letters of recommendation to: **Dr. Linda Saif, Food Animal Health Research Program, OARDC, The Ohio State University, Wooster, OH 44691.**

POSTDOCTORAL POSITION in **CARDIAC ELECTROPHYSIOLOGY**. Available immediately to study the ionic mechanisms of the β -adrenergic stimulation of firing rate in single cells isolated from the sinoatrial node, the pacemaker of the heart. Experience with patch-clamp techniques desired. Please send curriculum vitae and names of three references to: **Dr. Richard D. Nathan, Department of Physiology, Texas Tech University Health Sciences Center, Lubbock, TX 79430. An Equal Opportunity/Affirmative Action Employer.**

HARVARD MEDICAL SCHOOL JOSLIN DIABETES CENTER Postdoctoral Position

Position available to study regulation of gene expression controlling cell division and differentiation during early mouse embryogenesis, and the effects of maternal diabetes during pregnancy on these processes. Experience in mammalian embryology or molecular biology desired. Please send curriculum vitae, statement of research interests, and names of three references to: **M.R. Loeken, Ph.D., Section on Molecular Biology, Joslin Diabetes Center, One Joslin Place, Boston, MA 02215. An Equal Opportunity Employer.**

POSTDOCTORAL POSITION now available to study altered gene expression during chemical oral carcinogenesis using an *in vivo/in vitro* model and human tissue. Experience in cell culture, biochemical techniques, immunohistochemistry, and basic molecular biological techniques including *in situ* hybridization and PCR required. Send curriculum vitae and the names of three references to: **Dennis Solt, D.M.D., Ph.D., Northwestern University, Department of Pathology, 303 East Chicago Avenue, Chicago, IL 60611. FAX: (312) 503-8240.**

POSTDOCTORAL POSITION IN COCHLEAR PHYSIOLOGY. Available immediately to study the relationship between the responses to sound of auditory-nerve afferents and the vibration of the basilar membrane. Send curriculum vitae and the names of three references to: **Dr. Mario A. Ruggero, Department of Otolaryngology, University of Minnesota, 2001 6th Street S.E., Minneapolis, MN 55455. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.**

POSTDOCTORAL POSITION TO STUDY MOLECULAR BIOLOGY OF THE SARCOLEMAL SODIUM-CALCIUM EXCHANGER PROTEIN. A postdoctoral position is available immediately to complete the sequencing of the cDNA, to express the exchanger activity, to isolate and purify the protein, and to determine its structure and function in vascular smooth muscle in normotensive and hypertensive states. Experience in molecular biological techniques and/or protein chemistry is desirable. Send curriculum vitae and names of references to: **Dr. M. A. Matlib, Department of Pharmacology and Cell Biophysics, University of Cincinnati College of Medicine, Cincinnati, OH 45267-0575.**

POSTDOCTORAL POSITION AVAILABLE immediately to investigate (1) structure function relationships among cytochrome P-450 and its redox partners and (2) intracellular processing of these proteins especially cytochrome b_5 . Biochemistry and molecular biology background necessary. Send curriculum vitae and 3 letters of reference to: **L. Waskell, M.D., Ph.D., University of California San Francisco, VA Medical Center, Department of Anesthesia, 4150 Clement Street, San Francisco, CA 94121. Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITION available March 1, 1993 to study the mechanisms of cell membrane transport. Ph.D. with experience in recombinant DNA, electrophysiology or protein purification required. Salary of \$22,000 to \$30,000 will be commensurate with skills and experience. Send curriculum vitae and names of four references to: **Sarjeet S. Gill, Environmental Toxicology Graduate Program, University of California, Riverside, CA 92521. The University of California is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION to study the molecular genetics of DNA replication and the mammalian cell cycle. Epstein-Barr virus sequences as well as immunoglobulin, globin, *myc* and ribosomal RNA gene families are being used as model systems both *in vivo* and *in vitro* to study cell cycle regulation of DNA replication. Other projects include the role of cell cycle checkpoints in regulating DNA replication. Apply by mail and a fax copy to: **Dr. Carl Schildkraut, CH 416, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, NY 10461. FAX: (212) 829-7619. Equal Opportunity Employer.**

POSTDOCTORAL POSITION IN HUMAN MOLECULAR GENETICS. The University of Michigan. Position available isolating and analyzing genes responsible for human developmental anomalies. Project involves state of the art technology for genomic analysis. Opportunity for interaction with numerous investigators in the Human Genome Center and Developmental Biology Program. Applicants should have Ph.D. degree and familiarity with molecular genetic techniques. Contact: **Dr. Jerome L. Gorski, Division of Pediatric Genetics, Departments of Pediatrics and Human Genetics, The University of Michigan, 3570 MSRBII, 1150 West Medical Center Drive, Ann Arbor, MI 48109-0688. Telephone: (313) 763-5276. Fax: (313) 764-4133. An Equal Opportunity/Affirmative Action Employer.**

THREE POSTDOCTORAL POSITIONS available June 1, 1993 on NIH Training Grant in Chemical and Viral Carcinogenesis at the Kenneth Norris Jr. Comprehensive Cancer Center at the University of Southern California School of Medicine to train with Drs. Yuen Fung (molecular biology of retinoblastoma), Myron Goodman (fidelity of DNA synthesis and repair; molecular mechanisms of mutation), Peter Jones (DNA methylation; molecular biology of urologic tumors), Joseph Landolph (molecular biology of chemical carcinogenesis), Amy Lee (stress-inducible gene expression; cell cycle regulation), Pradip Roy-Burman (molecular genetics of feline leukemia viruses; tumor suppressor gene mutation in human cancer), and Suraiya Rasheed (molecular biology of RNA tumor viruses). Modern facilities include protein and DNA sequencing and peptide and oligonucleotide synthesis capabilities. Salary commensurate with training/experience. *Candidates must be U.S. citizens/permanent residents. Minority and women candidates strongly encouraged to apply.* Send three letters of recommendation, statement of research interests, and research mentor preference to: **Dr. Joseph Landolph, Principal Investigator, Kenneth Norris Jr. Comprehensive Cancer Center, P.O. Box 33800, 1441 Eastlake Avenue, University of Southern California, School of Medicine, Los Angeles, CA 90033-0800. Telephone: (213) 224-6526.**

POSTDOCTORAL POSITION—Molecular biologist to work on regulation, expression, site directed mutagenesis and structure-function studies of folate dependent enzymes. Send curriculum vitae and names of three references to: **G. Peter Beardsley, Ph.D., M.D., Department of Pediatrics and Pharmacology LMP 4083, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06510. FAX: (203) 785-7194. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION. Position available immediately to study the molecular biology of cellular differentiation (muscle differentiation). Areas of research include the regulation of muscle-specific gene expression and the mechanisms of myogenic inhibitors. Interested candidates are encouraged to send curriculum vitae to: **Dr. Alan Taylor, Director, Molecular Biology Core Laboratory, Department of Biological Sciences, The Wichita State University, Wichita, KS 67260-0026. An Equal Opportunity Employer.**

POSITIONS OPEN

A **POSTDOCTORAL FELLOWSHIP** is available to U.S. citizens for the study of mechanisms of phagocytic cell involvement in chemically induced liver or lung injury. A Ph.D. degree is required; research training in biochemistry, molecular and/or cell biology is preferred. Applicants should submit curriculum vitae and names of three references to: **Dr. Robert A. Roth, Department of Pharmacology and Toxicology, Michigan State University, East Lansing, MI 48824. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL FELLOWSHIP in Complex Systems Studies at the Santa Fe Institute (SFI).

The Santa Fe Institute expects to have an opening for a postdoctoral fellow beginning in September, 1993.

The Institute's research program is devoted to the study of complex systems, especially complex adaptive systems. Systems and techniques under study include the economy; the immune system; biomolecular sequence and structure; the origin of life; artificial life; models of evolution; neural networks, genetic algorithms, classifier systems and other adaptive computation techniques; complexity, entropy and the physics of information; nonlinear modeling and prediction; and others.

Candidates should have or expect to receive soon a Ph.D. and should have backgrounds in theoretical physics or chemistry, computer science, mathematics, economics, game theory, cognitive science, theoretical biology, dynamical systems theory, or related fields. An interest in interdisciplinary fields is essential. Evidence of this interest, in the form of previous research experience and publications, is important.

Applicants should submit curriculum vitae, list of publications, and statement of research interests, and arrange for three letters of recommendation. Incomplete applications will not be processed.

Send applications to: **Postdoctoral Committee, Santa Fe Institute, 1660 Old Pecos Trail, Suite A, Santa Fe, NM 87501.** Applications or inquiries may also be sent by electronic mail to: **postdoc@santafe.edu. SFI is an Equal Opportunity Employer.**

POSTDOCTORAL FELLOWSHIP HARVARD MEDICAL SCHOOL

NIH-funded position available July 1, 1993 to study mechanisms of signal transduction in vascular cells. An advanced degree in biochemistry, plus familiarity with recombinant DNA is highly desirable. Curriculum vitae and the names of three references should be forwarded to: **Dr. Craig Kent, Division of Vascular Surgery, Harvard Medical School, Beth Israel Hospital, 330 Brookline Avenue, Boston, MA 02215.**

POSTDOCTORAL FELLOWSHIP available immediately, supported by NIH grant, to perform molecular epidemiology and genetic characterization of human herpesvirus-6. Studies will involve PCR, recombinant DNA, as well as mapping/functional analyses of origin and packaging sites—with a view towards development of HHV-6 based vectors. Send curriculum vitae and names of three references to: **Steve Dewhurst, Department of Microbiology and Immunology, University of Rochester Medical Center, 601 Elmwood Avenue—Box 672, Rochester, NY 14642.**

POSTDOCTORAL FELLOW

A postdoctoral position is available immediately for a highly motivated scientist with training and research expertise in biochemistry/molecular biology to study gene expression and related signal transduction mechanisms in experimental cerebral ischemia. Applicants should have a doctoral degree with strong background in molecular/cell biology. Salary is in accordance with current NIH postdoctoral stipends which are dependent on qualifications and experience. Please send curriculum vitae and names of three references to: **Dr. John C. Lee, Department of Biochemistry, The University of Texas Health Science Center at San Antonio, San Antonio, TX 78284-7760.** All materials should be received no later than January 31, 1993. *An Equal Opportunity/Affirmative Action Employer.*

Fellowship Opportunity

DeCamp Fellowship in the Life Sciences, Ethics and Policy

Princeton University is pleased to offer a new resident fellowship program in the Life Sciences and Ethics. A purpose of the fellowships is to provide an opportunity for life scientists to devote a year toward an integrated plan of multidisciplinary study at Princeton University. The DeCamp Fellows will be affiliated at Princeton with the Department of Molecular Biology or the Department of Ecology and Evolutionary Biology. The fellows will also be affiliated with the Program in Ethics and Public Affairs in the Woodrow Wilson School and the University Center for Human Values at Princeton.

Applications are invited from individuals with a Ph.D. or equivalent degree, at any career stage from postdoctoral to mid-career faculty. Candidates must demonstrate a high level of quality in the work they have produced to date, and a clear interest in the study of a policy issue in the life sciences that raises ethical concerns.

The deadline for application materials is March 1, 1993 for fellowships beginning September 1993. There is no application form. Applicants should submit a curriculum vitae, a sample of their published work, and a brief statement describing the specific area that they are interested in pursuing during their tenure at Princeton. Applicants should also arrange for three letters of reference to be sent directly to the DeCamp Committee. All application materials should be sent to: The DeCamp Committee; Center for Energy and Environmental Studies; H-201 Engineering Quadrangle; Princeton University; Princeton, New Jersey 08544.

For further information, contact Nancy Duprey Koehler at the above address.

Princeton is an affirmative action/equal opportunity employer.

PROTEIN PURIFICATION / CHARACTERIZATION PROJECT LEADER

Miles Inc. has an opening for a Senior Staff Scientist with significant experience in purification/characterization of mammalian glycoproteins.


Responsibilities include:

- ◆ Leadership of projects through purification of therapeutic grade proteins for human clinical trials under cGMP environments.
- ◆ Implementation of novel purification methodologies in an industrial environment.
- ◆ Familiarity with state of the art biochemical assay methods to extensively characterize the purified glycoproteins.

Miles Inc., in Berkeley maintains a leading worldwide position in the field of Human Biologicals. In your search for an exciting career opportunity, consider joining our well funded state-of-the-art biotechnology site.

- A Ph.D. in Biochemistry/Biochemical Engineering with 8+ years of proven experience and accomplishment is required. Miles Inc offers
- attractive compensation and generous benefits.
- Send resume and salary history to

• JoAnn McHugh,
• Miles Inc, 4th &
• Parker Sts,
• P.O. Box 1986,
• Berkeley, CA 94701

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As an emerging biopharmaceutical company, T CELL SCIENCES leads the industry in developing complement and T cell receptor based therapeutics. We are turning scientific advances into drug candidates with the goal of treating human diseases of inflammation, autoimmunity, and cancer. The Company's first therapeutic entered human clinical trials in 1992.

IMMUNOLOGY

Senior Scientist

Significant career opportunity to be responsible for designing and executing research and development efforts of potential immunotherapeutic proteins. Requires Ph.D. in immunology or closely related field, and minimum 2 years relevant post-doctoral or industrial experience. A demonstrated capability for project planning and coordination, and clear record of accomplishment is expected. Prefer candidates experienced in cellular immunology. Additional experience in biochemistry or molecular biology is a plus.

PROCESS DEVELOPMENT

Senior Scientist

Be part of a pharmaceutical process development team transferring recombinant therapeutic pharmaceuticals from research to pilot scale production for pre-clinical evaluation. Hands-on position responsible for mammalian cell line selection, scale-up, optimization and validation; product evaluation assays; establishment of large scale culture systems; and development of GLP/GMP production and QC procedures. Requires Ph.D. in cell biology or related life science, 1-2 years post-doctoral experience, and strong interest in process development. Related industry experience in GMP environment a plus.

T CELL SCIENCES, INC. offers competitive compensation, comprehensive benefits, a progressive work environment, and opportunity for significant career advancement. For immediate confidential consideration, please forward C.V. to: Human Resources, T CELL SCIENCES, INC., 38 Sidney Street, Cambridge, MA 02139.

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**T CELL
SCIENCES**

Assistant Scientist

Marine Chemistry & Geochemistry

Tenure-track position available November 1, 1993. Successful candidate will, after a 1 to 2 year transition period, assume scientific leadership of a multi-year project of time-series measurements of deep-ocean particle flux at the OFP/JGOFS site in the Sargasso Sea. Will also be responsible for logistics of field work, processing and archiving samples, seeking continued funding for the project. The series is presently in its 15th year under NSF sponsorship with continuation anticipated. There is considerable latitude for the focus of successful candidate's research (e.g. carbon cycle, trace elements, stable or radioisotopes, etc.), and opportunities for cooperative projects abound. Requirements: Ph.D., oceanographic or related discipline preferred, good organizational skills, sea-going experience, knowledge of time series analysis, familiarity with MSDOS and UNIX based computers.

The Department has a staff of about 80 with 20 tenured and tenure-track scientists, and 18 Ph.D. candidates in the WHOI-MIT joint graduate program. Research interests of staff include organic and inorganic geochemistry, ranging from atmosphere to the earth's mantle, but with emphasis on the ocean. Facilities at WHOI include three ocean-going research vessels, the deep submersible ALVIN, a wide range of state-of-the-art analytical instrumentation, and access to national supercomputing facilities.

Send cover letter, curriculum vitae and names and addresses for 3 references by March 1, 1993 to:

Personnel Office Box 54PAP



**WOODS HOLE
OCEANOGRAPHIC
INSTITUTION**

Woods Hole, MA 02543

An equal opportunity/affirmative action employer M/F/H/V

POSITIONS OPEN

SENIOR POSTDOCTORAL FELLOW—The Department of Pathology and Laboratory Medicine of Temple University School of Medicine is seeking applicants for a Senior Postdoctoral Fellow with a Ph.D. in Biochemistry, Microbiology, or Pharmacology. The qualified individual should have experience in molecular biological techniques, interest in the molecular actions of chemotherapeutic agents and mechanisms of drug resistance required for projects to identify genes responsible for resistance to platinum antigens or agents. Send curriculum vitae and bibliography to: **Henry Simpkins, M.D., Ph.D., Professor and Chairperson, Department of Pathology and Laboratory Medicine, Temple University School of Medicine, 3401 North Broad Street, Philadelphia, PA 19140. Temple University is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE, Brookhaven National Laboratory. The Chemistry Department has a position available for a recent Ph.D. trained in pharmacology or neuroscience to conduct positron emission tomography (PET) research. Expertise in *in vivo* microdialysis in both anesthetized and freely moving rats, and experience in HPLC is required. Primary duties will include establishing an *in vivo* microdialysis facility designed to investigate interactions between the neurotransmitters dopamine, acetylcholine, serotonin and GABA. These studies will parallel ongoing studies in humans and primates using PET. The initial appointment is for one year, renewable. Candidates can apply by sending curriculum vitae, publications list, and names of three references to: **Dr. Stephen L. Dewey, Chemistry Department, Building 555, Brookhaven National Laboratory, Associated Universities, Inc., Upton, LI, NY 11973. Equal Opportunity Employer, M/F/D/V.**

POSTDOCTORAL RESEARCH ASSOCIATE. A postdoctoral research associate is needed immediately to map fatty acid synthesis genes and expand the genetic map of *Cuphea* (Lythraceae). *Cuphea* is a diploid with six linkage groups. This project entails mapping DNA markers, cloned fatty acid synthesis genes, and major mutants of genes underlying the synthesis of seed storage lipids. Experience with RFLP and RAPD markers and a background in genetics and genome mapping are needed. Please reply by January 30, 1993 by sending curriculum vitae and three letters of reference to: **Dr. Steven J. Knapp, Department of Crop and Soil Science, Oregon State University, Corvallis, OR 97331-3002. OSU is an Affirmative Action/Equal Employment Opportunity Employer and is responsive to dual-career needs.**

POSTDOCTORAL RESEARCH ASSOCIATE. A postdoctoral research associate with a strong background in statistics is needed to investigate a multitude of genome mapping and parameter estimation problems. The individual selected must work as part of a team of computer scientists, geneticists, and statisticians to develop or enhance estimation algorithms and software for mapping genetic markers and genes underlying quantitative traits. A Ph.D. in statistics or genetics and a very strong background in applied statistics are essential. Please reply by January 30, 1993 by sending curriculum vitae and three letters of reference to: **Dr. Steven J. Knapp, Department of Crop and Soil Science, Oregon State University, Corvallis, OR 97331-3002. OSU is an Affirmative Action/Equal Employment Opportunity Employer and is responsive to dual-career needs.**

POSTDOCTORAL RESEARCH ASSOCIATE, Brookhaven National Laboratory. The Chemistry Department has a position available for a recent Ph.D. in nuclear chemistry/nuclear physics to join the Solar Neutrino Group. The Group is part of the GALLEX International Collaboration, which detects solar neutrinos via their interactions in thirty tons of gallium at the Gran Sasso Laboratory, Italy. The first results of this work were published in *Physics Letters B*, July 1992. Experience in radiochemical manipulations, computer data processing and the ability to make periodic trips to Europe to conduct GALLEX-related work is required. The initial appointment is for one year, renewable, at an annual salary of \$28,500. Candidates can apply by sending curriculum vitae and three letters of reference to: **Dr. Richard L. Hahn, Chemistry Department, Building 555, Brookhaven National Laboratory, Associated Universities, Inc., Upton, LI, NY 11973. Equal Opportunity Employer, M/F/D/V.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE position in protein isolation and characterization (cancer therapy) available after February 15, 1993. Experience in protein separation techniques (electrophoresis, column chromatography, HPLC, etc.) necessary. Send curriculum vitae and have 3 letters of reference sent by February 1, 1993 to: **Professor Barnett Rosenberg, Department of Chemistry, 320 Chemistry Building, Michigan State University, East Lansing, MI 48824-1322. MSU is an Affirmative Action/Equal Opportunity Employer.**

FOX CHASE CANCER CENTER

One **RESEARCH ASSOCIATE** and one **POSTDOCTORAL ASSOCIATE** position are available in the Pharmacokinetics Lab of the Developmental Chemotherapy section. One position is in drug metabolism or drug analysis, and the other position is in synthetic organic chemistry or nanoparticle technology. Qualified individuals are encouraged to apply by sending curriculum vitae and 2 letters of reference to: **J. M. Gallo, Ph.D., c/o The Personnel Office, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. We are an Equal Opportunity Employer.**

RESEARCH ASSOCIATE position available immediately to participate in the study of the molecular and genetic basis of human brain tumors. Research involves hormonal regulation, production of stable cell lines, and genetic aberrations in meningiomas and pituitary adenomas. Ph.D. or M.D. required. Experience in immunocytochemistry, genetics, and molecular and biochemical techniques recommended. Interested applicants should send curriculum vitae, two letters of reference and salary requirements to:

**Peter McL. Black, M.D., Ph.D.
Department of Neurosurgery
Children's Hospital
300 Longwood Avenue
Boston, MA 02115**

RESEARCH ASSOCIATE

Position available to examine molecular regulation of hemoglobin gene expression, using a murine model with duplicated globin genes. Techniques include cloning, sequencing, production of constructs, and expression in transient and stable cells and transgenic mice. Ph.D./M.D. required, with experience in molecular biology. Send curriculum vitae and 3 references to: **Blanche P. Alter, M.D., Chief, Division of Pediatric Hematology/Oncology, C3-41 Children's Hospital, University of Texas Medical Branch, Galveston, TX 77555-0361. Equal Opportunity/Affirmative Action Employer, M/F/H/V. UTMB hires only individuals authorized to work in the United States.**

RESEARCH ASSOCIATE

Position available to examine cytokine regulation of erythropoiesis in normal ontogeny, hemoglobinopathies, and marrow failure disorders. Techniques include tissue culture, cell separation, and protein and nucleic acid analyses. Ph.D./M.D. required, with experience in cell and/or molecular biology. Send curriculum vitae and 3 references to: **Blanche P. Alter, M.D., Chief, Division of Pediatric Hematology/Oncology, C3-41 Children's Hospital, University of Texas Medical Branch, Galveston, TX 77555-0361.**

ASSISTANT RESEARCH IMMUNOLOGIST

Immediate opening for an Assistant Research Immunologist to perform transplantation immunology studies using DNA typing methods for HLA, Flow cytometry, MLC and ELISA techniques. Develop assays to detect HLA antibodies in transplant patients, to define specificity of antibodies and to refine existing procedures such as the flow cytometry crossmatch. M.D. or Ph.D. in biological or related field and 4 years of prior research experience as evidenced by bibliography required. Demonstrated knowledge and skills in the following areas: HLA typing by serology and DNA, Flow cytometry, ELISA, DNA sequencing, Southern and Western blotting, one and two-dimensional gel electrophoresis. Salary is \$41,600 annually. Send résumé and list of 3 references to: **Director, UCLA Tissue Typing Laboratory, 950 Veteran Avenue, Los Angeles, CA 90024-1652. UCLA is an Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

CONSERVATION BIOLOGISTS and RESOURCE MANAGEMENT EDUCATORS: The School for Field Studies, in conjunction with Northeastern University, seeks full-time and summer faculty for various worldwide locations—Baja, Mexico; Caribbean; Costa Rica; Kenya and Australia. **QUALIFICATIONS:** Ph.D. preferred, field and research experience in the region, two years of teaching at the undergraduate level, leadership abilities, management experience, and the ability to live in a remote field setting with 32 undergraduates in an interdisciplinary teaching environment. **TO APPLY:** Send curriculum vitae, a detailed letter explaining skills and experience to: **SFS Search 93, The School for Field Studies, 16 Broadway, Beverly, MA 01915.**

MOLECULAR BIOLOGIST

ImmunoPharmaceutics, Inc. is a development stage biopharmaceutical company specializing in computer and antibody directed drug discovery focusing on the cardiovascular and immune regulation areas (see *Med. Chem. Res.*, 1991, 1, 101-8). Candidates should have a Ph.D. in Molecular Biology with several years of experience including work in immunoglobulin gene research, protein engineering, and gene expression research. A strong interest in working as the molecular biology member of a multidisciplinary team is required.

We offer competitive compensation, benefits, equity participation, relocation assistance and a highly desirable San Diego location. Please forward your résumé/curriculum vitae to: **ImmunoPharmaceutics, Inc., Department JL93M, 11011 Via Frontera, San Diego, CA 92127. Equal Opportunity Employer. No agencies, please.**

MOLECULAR GENETICIST

The Division of Human Genetics, University of Maryland at Baltimore, seeks a full-time, tenure-track investigator who is applying molecular approaches to developmental/neurobiological problems in mammalian or other eukaryotic systems. The successful candidate will be expected to participate in an interactive research environment and contribute to the training of medical, graduate, and professional students. A Ph.D. or M.D. degree, with at least two years of relevant postdoctoral training and experience, is required. The ability to obtain independent funding within a reasonable period is essential. This position is available July 1, 1993.

The Division of Human Genetics consists of 11 full-time faculty members (8 Ph.D., 2 M.D., and an M.D./Ph.D.), 5 genetic associates, and a clinical coordinator. A broad range of basic and clinical research is represented. The Division offers a Ph.D. degree in Human Genetics, and its training program is fully accredited in all subspecialty areas by the American Board of Medical Genetics. Research interests include molecular cytogenetics, genome organization and regulation, and gene mapping of inherited disorders.

Salary is commensurate with qualifications and experience. Candidates should submit current curriculum vitae, selected reprints, a detailed statement of past experience, a description of future research plans, and the names of three references to: **Maimon M. Cohen, Ph.D., Director, Division of Human Genetics, 655 West Baltimore Street, Room 11-037; Baltimore, MD 21201.**

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

NMR SPECTROSCOPIST

Professional Technical Staff position entails running a growing NMR facility, training users, and consulting with researchers on a variety of projects. Duties include maintenance and operation of (1) five high field NMR spectrometers, including JEOL GSX500, GSX270, GX270 (for solids) spectrometers, a GE QE300, and a Bruker WM250, (2) two Bruker ESP300 EPR spectrometers, and (3) Silicon Graphics work stations for off-line data processing. Applicants should have a Ph.D. or equivalent with several years of high resolution multi-nuclear NMR experience. Experience with 2D-NMR, solid state NMR, electronics, and computers is desirable.

Send résumé to: **Professor Robert Pascal, Operations Committee, Department of Chemistry, Princeton University, Princeton, NJ 08544. Princeton University is an Equal Opportunity/Affirmative Action Employer.**




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ASSOCIATE DEAN FOR RESEARCH

Applications and nominations are being accepted for the newly established position of Associate Dean for Research. The Associate Dean will be responsible for research administration and development and will: 1) serve as representative of and advocate for the research community to the Dean COM/VPHA; 2) provide advice and consultation to chairs and faculty to enhance the research mission of the COM; 3) represent the research community in local, state and federal research-related issues; 4) facilitate development of program projects and consortium research among basic and clinical scientists; and 5) work with investigators and university officials to facilitate initiatives for funding of research and for implementation of funded projects. The Associate Dean will be involved with the planning and construction of major research facilities.

The successful applicant must have: 1) an earned M.D., Ph.D. or D.Sc.; 2) scholarly credentials sufficient for appointment at the rank of full professor; 3) interpersonal skills to successfully work with clinical and basic science faculty; 4) research experience including major funding for at least five years as a principal investigator on nationally competitive awards or intramural grants at a nationally recognized research institution; 5) demonstrated ability to facilitate the research efforts of others and an ability to foster collaborations across institutions, professions, and disciplines; and 6) strong evidence of administrative and leadership ability in the health sciences.

The Quillen COM offers the M.D., Ph.D. and M.S. in Biomedical Sciences, and six residency programs. In association with the Veterans Administration Medical Center and four other community-based hospitals over 2000 beds are available for medical education and clinical research. The college is participating in the Kellogg Foundation Community Partnership Initiative and is a key player in the development of a bio-technology corridor in Northeast Tennessee. ETSU is a regional, state-assisted university with an enrollment of over 12,000 students.

The position is available July 1, 1993. Review of applications will begin February 15, 1993 and continue until the position is filled. Nominations and applications should consist of a letter of application accompanied by a current curriculum vitae and the names of five references with address (including E-mail where possible), telephone and FAX numbers. Send to: Dr. Wilsie Bishop, Chair, Search Committee for Associate Dean for Research; James H. Quillen College of Medicine; East Tennessee State University; P.O. Box 70424; Johnson City, Tennessee 37614-0424. AA/EEO.

ASSISTANT PROFESSOR

Research position available in the Department of Anaesthesia, University of Western Ontario. Candidates should have a Ph.D. with postdoctoral experience in cellular or molecular biology. The successful applicant will be expected to develop a vigorous, externally funded research program, a component of which must be anaesthesia related. The University of Western Ontario provides a rich environment for collaborative interaction with scientists in affiliated hospitals and research institutes. Opportunities exist for cross appointments in appropriate basic science departments. Applications consisting of curriculum vitae, statement of research goals, selected reprints and names and addresses of three referees should be submitted to Dr. Adrian W. Gelb, Professor and Chairman, Department of Anaesthesia, University Hospital, 339 Windermere Road, London, Ontario, Canada, N6A 5A5. Preference will be given to candidates who apply before March 31, 1993. This position carries a competitive salary and benefits package. In accordance with Canadian Immigration requirement, priority will be given to Canadian citizens and permanent residents of Canada.

TUFTS

CHAIR, DEPARTMENT OF MOLECULAR BIOLOGY AND MICROBIOLOGY

Applications and nominations are invited for the Chair of the Department of Molecular Biology and Microbiology at Tufts University in Boston. The Department, comprising a dynamic and distinguished research and teaching faculty, is a component of the Schools of Medicine, Dental Medicine, Veterinary Medicine, and the Sackler Graduate School. We seek a candidate with an outstanding record of scholarship, an internationally recognized research program and demonstrated academic leadership, and a commitment to faculty development and teaching of students in the professional health schools and the graduate school.

Letter of application or nominations should be sent to:

Dr. B. David Stoller
Chair, Molecular Biology and
Microbiology Search Committee
c/o Office of the Dean, Sackler 8
Tufts University School of Medicine
136 Harrison Avenue, Boston, MA 02111

Candidates should include a curriculum vitae, list of published research, and a summary of academic accomplishments and administrative experience.

We encourage applications from and nominations of women and minority group members. Tufts University is an Equal Employment Opportunity/Affirmative Action Employer.

RESEARCH ENGINEER (DESIGN)

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MATERIALS RESEARCH LABORATORY UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

The Materials Research Laboratory (MRL) at the University of Illinois at Urbana-Champaign is seeking a design engineer to assist the UNI-CAT, a University-National Laboratory-Industry Collaborative Access Team, in the precision mechanical engineering design for the beamline components and the end-station apparatus of one sector of the beamlines that the UNI-CAT will develop at the Advanced Photon Source (APS), Argonne National Laboratory. The position involves frequent contacts with the design group members of various institutions of the UNI-CAT, APS Experimental Facility Group and various firms.

The position requires comprehensive experience in designing precision mechanical and/or optical components using CAD/CAM systems. A working knowledge of fabrication and assembly techniques for ultra-high vacuum components, instrumentation, pneumatics, hydraulic systems and controls is required. Actual design experience in synchrotron radiation facility and analytical capabilities regarding stress and thermal assessment would be beneficial. Formal training in Mechanical/Industrial Engineering with a B.S. or M.S. level or equivalent and several years of actual design experience in industrial or research/development environment is also required.

This is a 12 month, 100% time, term appointment with standard university benefits. Salary will be commensurate with education and experience. The position is available in the Spring of 1993. In order to ensure full consideration, applications must be received by February 26, 1993. Please send letter of application, resume and three letters of reference to Professor Haydn Chen, c/o Donna Jacobs, University of Illinois, Materials Research Laboratory, 104 South Goodwin Avenue, Urbana, Illinois 61801, phone (217)244-2944.

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

FACULTY POSITION IN MICROBIOLOGY AND IMMUNOLOGY

The Department of Microbiology and Immunology, University of Health Sciences/The Chicago Medical School, invites applications for tenure/tenure-track faculty position at the rank of **ASSISTANT, ASSOCIATE OR FULL PROFESSOR**. Applicants must have a Ph.D. and/or M.D. degree with solid training, research experiences, and interests in **medical virology, molecular biology or immunogenetics**. The successful candidate will be expected to bring and establish a strong extramurally funded research program in the field of **Molecular Virology/Immunology** and to participate in teaching medical and graduate students. The Department has established strength in the areas of Molecular Biology and Immunology. The salary will be commensurate with qualifications and a negotiable starting date. Applicants should send curriculum vitae, a brief outline of current and future research plans, and the names of at least three references to: **Yoon Berm Kim, M.D., Ph.D., Professor and Chairman, Department of Microbiology and Immunology, University of Health Sciences/The Chicago Medical School, 3333 Green Bay Road, North Chicago, IL 60064.**

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Assistant Professor

NYU Medical Center, Department of Environmental Medicine is a multidisciplinary department with expertise in molecular biology, toxicology, human exposure assessment, carcinogenesis and epidemiology. We are currently searching to fill 4 new tenure-track or tenured faculty positions, at any level, in the areas of immunology, molecular biology and chemistry.

Successful candidates will be expected to develop an independently-funded research program and to collaborate with existing faculty members in the department.

Interested candidates should send their Curriculum Vitae and three references to Dr. Max Costa, Professor and Chairman, Department of Environmental Medicine, NYU Medical Center, 550 First Ave., New York, NY 10016. Resumes must be received by February 26. EOE, M/F.

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Manufacturing Research Associates (2) - Fermentation

You will assume responsibility for the production of recombinant neurotrophic factors in treating neurological diseases, and perform fermentation and initial separation steps according to current GMPs. A BS/MS in Biology, Chemical Engineering, Microbiology or a related field is required together with 1-2 years' experience with GMP production of biologics using recombinant *E. coli* fermentations. Experience with analytical methods, including SDS-polyacrylamide gel electrophoresis desirable. Shift work required. BIN-FM

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The qualified candidate will have a PhD in Cell or Molecular Biology, Microbiology or a

closely related discipline; and 1-4 years of experience in cell biology/culture and GMP operations. The ability to effectively interface with multidisciplinary professionals at a level of sophistication commensurate with state-of-the-art science, and to ensure the group's involvement with other areas of the Company are additional vital attributes. Supervisory experience is preferred.

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SENIOR PROJECT ENGINEER; process engineering; establish collaborative efforts in research through evaluation of potential bioreactor designs and operating protocols. Facilitate transfer of techniques for production of biological products (vaccine and therapeutic proteins) from research to manufacturing. Develop, improve and optimize process for existing products through experimental programs, implementation, and analysis of factory data. Identify and develop new technologies and implement required changes. Support biological manufacturing: troubleshooting, profit improvement, and installation of expanded manufacturing capabilities. Requirements: Ph.D. Chemical/Biochemical Engineering and 1 year of experience with chemical and biochemical engineering background including cell culture, and development of bioreactors for suspension and anchorage dependent cell lines for viral infection and production. Experience must include design and evaluation of porous microcarrier supports for cell culture-fundamental evaluation of support surfaces, demonstration of improved performance with such surfaces in bioreactors, ability to monitor cell metabolism through use of coulter channelizer and glucose/lactate/LDH/NH₃ analyzers and ability to monitor target product proteins by kinetic based chromogenic assays. Ability to combine funding information and large scale bioreactor data into mathematic model for analysis of cell attachment, growth and substrate consumption. Experience in design, developing, construction and testing of prototype devices. Doctoral research must have been in an area with application of large-scale cell culture to industrial manufacturing setting, with graduate program encompassing extensive industrial (biotech) experience. Thesis compliance must demonstrate effective integration of acquired industrial and academic experience. Candidate must have published papers in biotech. or related engineering journals documenting relevant research and have made refereed presentations in formal scientific/engineering conferences. Salary: \$4770 per month, 40 hours per week; send curriculum vitae or résumé to: Philadelphia Job Bank, 444 North 3rd Street, Philadelphia, PA 19123. J.O. #4488484.

SCIENTISTS—Xenometrix, Inc. is accepting applications for scientist positions to develop novel and innovative *in vitro* toxicology assays. Candidates should have a Ph.D. in either Molecular/Cellular Biology with experience in cell culture and transfection or Yeast Genetics. Both positions require three years of postdoctoral experience.

RESEARCH ASSOCIATES—We are also accepting applications for several Research Associate positions requiring hands-on experience in molecular biology, yeast biology, or mammalian cell culture. A minimum of B.A./B.S. is required.

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AIR POLLUTION RESEARCHERS

California Air Resources Board is now accepting applications for **AIR POLLUTION RESEARCH SPECIALIST**. Must have a B.S. degree in engineering, math, or physical/biological/environmental science and 4 years of experience in research. Salary: \$3928 to \$4742 per month plus benefits. Inquire before January 28, 1993 by writing to: Air Resources Board; 2020 L Street; Sacramento, CA 95814 or call (916) 323-1158.

PLANT CONSERVATION BIOLOGIST at research facility of non-profit tropical botanic garden. Develop a research program in conservation of Caribbean Basin flora, including subtropical Florida, emphasizing endangered habitats and plant species. Ph.D. (biological sciences, emphasis on botany/ecology), experience in conservation-related research or equivalent, and familiarity with Caribbean plant conservation issues. Spanish fluency preferred. Salary competitive. Send cover letter and résumé with three references by March 1, 1993 to: Dr. Jack Fisher, Fairchild Tropical Garden, 11935 Old Cutler Road, Miami, FL 33156.

ANNOUNCEMENTS

PREDOCTORAL TRAINING OPPORTUNITIES

The Departments of Microbiology, Biochemistry and the Kenneth Norris Jr. Cancer Center at the University of Southern California School of Medicine have research opportunities for predoctoral students. Research training programs leading to the Ph.D. in Microbiology or Biochemistry are in the areas of molecular and cell biology, virology, carcinogenesis, and immunology. Applicants must be permanent residents or U.S. citizens. For more information contact either: Graduate Administrator, Department of Microbiology, USC School of Medicine, 2011 Zonal Avenue, Los Angeles, CA 90033-1054. Telephone: 213-342-2337; FAX: 213-342-1721 or Dr. Peter Jones, Kenneth Norris Jr. Comprehensive Cancer Center, 1441 Eastlake Avenue, Los Angeles, CA 90033-0800. Telephone: 213-224-6503; FAX: 213-224-6593.

RESEARCH GRANTS

As part of its efforts to encourage the utilization of alternatives to traditional uses of laboratory animals, The Demeter Fund is soliciting research proposals to develop such methods. Funding up to \$40,000 each is available to support individual projects at U.S. universities and research institutions. Special attention will be given to proposals which focus on the production of monoclonal antibodies through *in vitro* systems. Deadline for applications is 30 April 1993, with recipients announced on 15 July 1993. For further information and application instructions contact (mail or FAX only): The Demeter Fund, Suite 204 Noble Plaza, 801 Old York Road, Jenkintown, PA 19046-1685 (FAX: 215-887-2088).

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This unique program offers the candidate with an earned doctorate in the sciences the opportunity to obtain the Doctor of Optometry (O.D.) degree in two calendar years. Employment opportunities exist in private practice, industry, education, and research. Contact: Dr. D. Chauncey, Program Director, Accelerated Program, The New England College of Optometry, Room S, 424 Beacon Street, Boston, MA 02115.

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Syracuse University, Syracuse, NY 13244-4100
Telephone: +315-443-5923; FAX: +315-443-4070
E-mail: hbrumber@mailbox.syr.edu

MEETINGS

Exxon Valdez Oil Spill Symposium February 2 to 5, 1993, Anchorage, Alaska

A symposium presenting results of studies about the Exxon Valdez oil spill is scheduled for February 2 to 5, 1993. Symposium sponsors are the Exxon Valdez Oil Spill Trustee Council, the University of Alaska Sea Grant College Program, and the American Fisheries Society. The first day's program features summary presentations and will be free; there will be a registration fee of \$95 for the technical sessions February 3 to 5.

For more information contact: Brenda Baxter, University of Alaska Fairbanks, Alaska Sea Grant College Program, Fairbanks, AK 99775-5040. Telephone: 907/474-7086, FAX: 907/474-6285.

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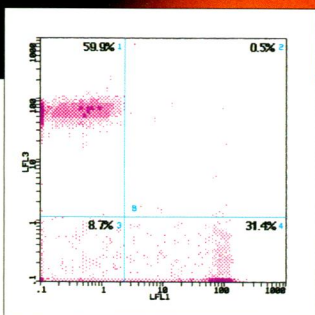
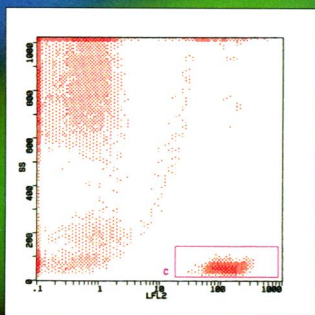
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