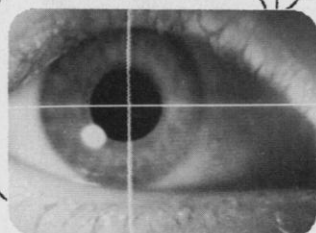


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*Istituto Veneto di Scienze, Lettere ed Arti  
Venice*

### International Symposium on Advances and Perspectives in the Area of Immunosuppression 22nd-23rd October 1993

The Symposium will last for two days.

On the first day the basic aspects of immunosuppression will be discussed in a series of talks covering biochemistry, biophysics, pharmacology, cell biology.

#### Speakers:

G. DORIA (Rome),	J.F. BOREL (Basle),
K. WÜTHRICH (Zürich),	R. WENGER (Basle),
C.B. KLEE (Bethesda),	R.E. HANDSCHUMAKER (New Haven),
M. ZURINI (Basle),	S.J. BURAKOFF (Boston).

The second day will be structured as a Round Table Discussion on the perspectives of immunosuppression for transplantation surgery of various organs.

#### Participants:

E. ANCONA (Padua),	D. D'AMICO (Padua),
H. AUCHINCLOSS (Boston),	J. FUNG (Pittsburgh),
A. MAZZUCCO (Verona),	G. PEZZUOLI (Milan),
J.R. THISTLETHWAITE (Chicago),	N. SHUMWAY (Stanford).

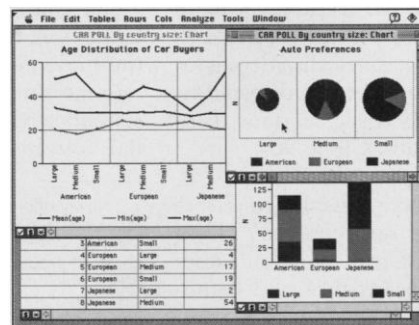
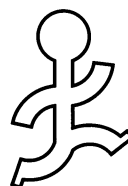
The venue of the Symposium will be the Palace of the Institute in Campo Santo Stefano in Venice. Attendance will be limited to about 100 participants. No registration fee will be required. Interested person should contact the secretariat:

Istituto Veneto di Scienze, Lettere ed Arti,  
Campo Santo Stefano, 2945, 30124 Venezia (Italy).  
Tel.: +39-41 5210 177, Fax : +39-41 5210 598.

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## Reagents for DNA Sequencing

The COOL GLOW DNA Sequence Detection System is a complete reagent kit for detecting products of dideoxy termination sequencing methods through chemiluminescence. COOL GLOW replaces radioisotopic labels with alkaline phosphatase activation of a chemiluminescent substrate. In the system, 5'-biotinylated primers replace radioactive tags in common, thermocycled, or multiplex sequencing protocols. After the reaction is complete, reaction products are simultaneously separated and transferred to a membrane with an electrophoresis system or by manual blotting techniques. The membrane is then incubated at room temperature with the COOL GLOW reagents. In less than 1 hour the membranes are ready to expose to film; in less than 90 min, typical films are ready to read. No hazardous chemicals or radioactive wastes are involved. **IntelliGenetics Inc. Circle 89.**

## Antibodies

A new monoclonal antibody (mAb) reacts specifically with BLA.36, a developmentally regulated antigen expressed on the plasma membrane of B lymphocytes, Reed-Sternberg cells, and Hodgkin's cells but not on T lymphocytes. It can be used to distinguish Hodgkin's disease from other disorders and to study the growth regulation of B cell lymphomas and their distinction from T cell processes in B-5-fixed or formalin-fixed, paraffin-embedded tissue sections. A mAb that reacts with *Helicobacter pylori*, an agent in gastric disorders, is for use on formalin-fixed, paraffin-embedded tissue sections. **BioGenex Labs. Circle 90.**

An antibody specific to *Escherichia coli* serotype 0157:H7, a food-borne pathogen that causes hemorrhagic colitis and hemolytic uremic syndrome, is avail-

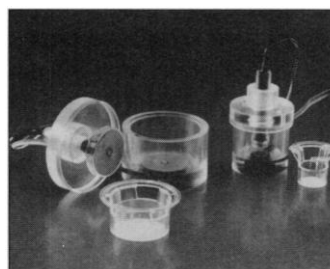
able unlabeled for use as capture antibody; labeled with peroxidase or phosphatase for microwell enzyme-linked immunosorbent assay, protein immunoblotting, and immunohistology; or labeled with fluorescein for microscopic analysis. **Kirkegaard & Perry Labs. Circle 91.**

Antibodies to retinoic acid receptor alpha and beta, vitamin D receptor, and various forms of thyroid hormone receptor are available. New polyclonals to HSP84, HSP86, and HSP104 are also available. **Affinity BioReagents. Circle 92.**

**Data Analysis Software** SCIENTIST for MS-DOS systems is a data analysis and numerics package developed to meet the modeling and simulation needs of many disciplines. The program transparently processes both standard and differential equations. The graphics editor supports annotation, editing, grouping, and more to produce publication-quality output. Pull-down menus with templates and dialog boxes facilitate rapid use, although advanced users can bypass these aids and enter models directly into the model editor or modify previously archived files. The program requires an IBM-compatible computer, 640 K of random access memory, MS-DOS 3.3 or later, graphics card, and hard drive. **MicroMath. Circle 93.**

## Tissue Resistance Measurement

Tissue culture cups can be transferred from their culture wells to the Endohm chamber for accurate measurement of membrane resistance by EVOM, an epithelial voltohmmeter. The use of



concentric pairs of electrodes above and beneath the membrane reduces background resistance from 150 ohms to <5 ohms. The shape of the current electrodes allows a more uniform current density to flow across the membrane. Because electrode position is fixed, variation in readings on the same sample is reduced to 1 to 2 ohms. **World Precision Instruments. Circle 94.**

## Transfer Membranes

Magna Charge nylon transfer membranes are inherently charged for superior results in alkaline blots, Southern (DNA) blots, and reprobing procedures. The strength, flexibility, and stability of the reinforced membrane and the tenacity of the bond between the nucleic acid and the nylon allow multiple hybridizations or reprobings without breaking or flaking of the membrane. **Micron Separations Inc. Circle 95.**

## Ceramic Biological Research Substrate

CaPstrate biological research substrates are calcium phosphate ceramics that mimic dental enamel, bone mineral, and other hard tissues. A variety of sizes, shapes, and forms are available. Dense materials are standard, but porous forms and particulates with much greater surface areas are available on request. CaPstrate can be used for protein and peptide research,

growth factor research, tissue adherence studies, cell culturing, adhesives research, dentifrice additive studies, digestion studies, dissolution experiments, and more. **Bio-Interfaces. Circle 96.**

## Literature

LMG, IHM, MUCL, and LMBP are four catalogs listing more than 18,000 of the 40,000 strains and plasmids available in the Belgian Coordinated Collections of Microorganisms (BCCM). Data on applications, growth conditions, and pathogenicity of more than 7000 bacteria of biotechnological, agricultural, or medical importance (LMG) and 11,000 filamentous and yeast fungi of biomedical (IHM) and agricultural or industrial (MUCL) importance are described. A selection of 330 plasmids (LMBP) that can replicate in *Escherichia coli*, mainly constructed for cloning and high-level expression of coding sequences in bacteria, yeasts, fungi, and animal cells, is described in full molecular detail. **BCCM. Circle 97.**

*The Leucocyte Antigen Facts Book* is a compendium that contains a brief description of all the leucocyte surface antigens that have been sequenced. **Serotec. Circle 98.**

*Gilson Peptide Purification System* is a brochure on an automated high-performance liquid chromatography system that offers fast analysis and purification of synthetic peptides. *Introducing the fastest, most economical multiple peptide synthesizer available* describes a system that can create up to 48 different peptides simultaneously. **Gilson Medical Electronics. Circle 99.**

*Denver Instrument DI-Series Toploading Balances* introduces a line of balances with features including menu-driven operation, automatic calibration, backlit liquid crystal display, RS-232C interface, and software enhancements for statistical analyses. **Denver Instrument Co. Circle 100.**

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.

# SCIENCE CAREERS

145th YEAR

1993

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## BS ★ MS ★ PhD SCIENTISTS ARE IN DEMAND

WASHINGTON, May 21 - The American Association for the Advancement of Science (AAAS) operates an Employment Exchange during the weeks of three AAAS-sponsored annual meetings: *AAAS Annual Meeting*, *AAAS Pacific Division Annual Meeting*, and *Science Innovation*. The Employment Exchange is a career opportunities/career development service for candidates seeking employment, and employers with positions to be filled. Interview scheduling, position posting, a message center, job and resume referrals, private interview booths, and career development seminars are provided during the weeks of these annual meetings.

AAAS will be operating a **Job and Resume Referral Service** at the **AAAS Pacific Division Annual Meeting at the University of Montana, Missoula, 20-24 June**. A **full-service Employment Exchange operation** (including interview scheduling services and career development seminars) will be conducted at **Science Innovation '93 at the Hynes Convention Center in Boston, Massachusetts, 6-10 August**.

The Employment Exchange recently expanded its services to include year-round candidate referrals. Now in addition to the services provided at the AAAS-sponsored meetings, candidates also receive the benefit of continuous year-round exposure to scientific employers by advertising in the new *Employment Exchange Bulletin*.

If you are presently in the job market, a graduate student, or a postdoctoral or experienced scientist, and would like to take advantage of our efforts on your behalf, **contact: Jacquelyn Roberts or Nina Kobes, AAAS Employment Exchange, 1333 H Street, NW, Suite 1163, Washington, DC 20005**. Or call, **202-326-6737** for more information and enrollment forms.

### ATTENTION SCIENCE RECRUITMENT ADVERTISERS

You, too, may take advantage of the services provided by the **AAAS Employment Exchange**. Call **202-326-6737** today, and find out how you can participate in the Exchange at the upcoming meetings in June and August 1993.

Be sure to ask about receiving a **FREE** copy of the *Employment Exchange Bulletin* (available in August '93), and our **\$50 SPECIAL** for **SCIENCE** Recruitment Advertisers!!

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**CONDITIONS:** Personnel advertising is accepted only with the understanding that the advertisers do not discriminate among applicants on the basis of race, sex, religion, age, color, handicap or sexual preference. The AAAS encourages employers to actively recruit and employ underrepresented minority groups. *Science* reserves the right, at its discretion, to decline to publish advertisements submitted to it.

## POSITIONS OPEN

### HUMAN BEHAVIORAL PHARMACOLOGIST

Applications are invited for a tenure-track position in the Department of Psychiatry and Human Behavior at the University of Mississippi Medical Center. The position will be at the **ASSISTANT or ASSOCIATE PROFESSOR** level, depending upon qualifications. Candidates should have a Ph.D. in Psychology, Pharmacology or Neuroscience and/or M.D. with expertise in behavioral pharmacology using human subjects. The successful candidate will be expected to develop an externally funded research program in human behavioral pharmacology and to establish collaborative relations with other scientists within the department. Salary will be commensurate with rank and start-up funds and space are available. Applicants should send curriculum vitae, a statement of current and future research goals and names of three references to: **William L. Woolverton, Ph.D., Chair of Search Committee, Department of Psychiatry and Human Behavior, the University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216.** Applications will be accepted until August 31, 1993. *Equal Opportunity Employer, M/F/D/V.*

**ASSISTANT/ASSOCIATE PROFESSOR PHARMACOLOGY/TOXICOLOGY.** The Department of Pharmacology/Toxicology at Ponce School of Medicine (PSM) invites applications at the Assistant or Associate Professor level. Criteria include a Ph.D. (Pharmacology or Toxicology preferred) and/or M.D. with two or more years of postdoctoral experience. Preferred candidates will be able to develop an extramurally funded research program that applies modern methods of biochemistry and molecular biology to toxicology. Applicants with prior teaching experience in medical pharmacology are highly desired because providing high quality educational experiences in the medical pharmacology program is a requirement of this position. *Minority candidates and women are encouraged to apply.* Submit curriculum vitae, summary of research plans and educational interests, and the names of three references to: **Dr. Arthur Hupka, Chairman, Department of Pharmacology/Toxicology, Ponce School of Medicine, P.O. Box 7004, Ponce, Puerto Rico 00732.** Search will continue until the position is filled. *PSM is an Equal Opportunity Institution.*

### ASSISTANT PROFESSOR

The Department of Biochemistry at NYU Medical Center is seeking to fill a tenure-track position in the areas of molecular genetics or biochemistry at the level of Assistant Professor.

Abilities of the applicant are more important than his or her area of research. Applicants should hold a Ph.D. or M.D. degree and should have at least two years of postdoctoral research experience. The desired candidate is expected to establish a rigorous independent research program, to participate in teaching graduate and medical students and to contribute to other departmental academic activities.

Applicants should submit curriculum vitae, bibliography, letters of reference from three persons familiar with their research and teaching abilities, and a summary of present and future research interests to: **Dr. Warren Jelinek, Faculty Search Committee, Department of Biochemistry, NYU Medical Center, 550 First Avenue, New York, NY 10016.** Curricula vitae must be received by June 14, 1993. *Equal Opportunity Employer, M/F.*

### NYU MEDICAL CENTER Where Excellence Is A Way Of Life.

**ASSISTANT PROFESSOR OF PHARMACEUTICAL SCIENCES.** Applicants for the full-time, tenure-track position should possess a Ph.D. in medicinal/pharmaceutical chemistry with a Pharm.D. or B.S. in pharmacy preferred. Interest or experience in toxicology, pharmacetics, nutrition, clinical pharmacy or pharmacology is highly desirable. Duties include the teaching of medicinal chemistry and other professional/graduate courses, and the development of an independent research program. Salary is commensurate with experience. Send curriculum vitae including the names and addresses of four references to: **S. E. Ohia, Ph.D., School of Pharmacy & Allied Health, Creighton University, Omaha, NE 68178.** *Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### ASSISTANT/ASSOCIATE PROFESSOR ORAL PATHOLOGY

The University of Maryland at Baltimore (UMAB) Department of Oral Pathology, Dental School is seeking a **FACULTY MEMBER** at the assistant/associate professor level, tenure-track, with particular interest and experience in experimental oral pathology. Applicants are expected to compete successfully for extramural funding and may have existing grant support. Expertise in cell and molecular biology techniques is essential. Responsibilities include didactic teaching of general pathology and oral pathology as well as active participation in the Ph.D. graduate program in Oral and Experimental Pathology. Rank and salary will be commensurate with the applicant's credentials and accomplishments. Submit curriculum vitae with names of three references prior to 1 September 1993: **J.J. Sauk, Chair Department of Oral Pathology/Dental School, UMAB, 666 West Baltimore Street, Baltimore, MD 21201.** *University of Maryland at Baltimore is an Equal Opportunity Employer.*

### MOLECULAR NEUROBIOLOGIST

The section of Neurobiology and Behavior, Division of Biological Sciences, Cornell University, invites applications for a tenure-track position in molecular neurobiology at the **ASSISTANT PROFESSOR** or beginning **ASSOCIATE PROFESSOR** level, available July 1994.

We seek a neurobiologist studying the molecular mechanisms of signal transduction in the nervous system. Possible research interests include molecular mechanisms of transmitter release, structure/function studies of channels and receptors, second messenger pathways, and other functional aspects of synaptic transmission and its modulation.

Applicants should send curriculum vitae, selected reprints or preprints, and statements of research and teaching interests, and arrange to have three letters of recommendation sent to: **Search Committee, Section of Neurobiology and Behavior, Cornell University, Seeley G. Mudd Hall, Ithaca, NY 14853.** The Search Committee will begin screening applications September 15, 1993.

*Cornell University is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are urged to apply.*

**FACULTY POSITIONS.** The Department of Microbiology and Immunology, and the Program in Molecular Medicine of the University of California, San Francisco, School of Medicine, are seeking outstanding candidates to fill two tenure-track or tenured positions. In addition to departmental affiliation, the positions include membership in the Program in Biological Sciences, the excellent campus-wide graduate program. The search will consider candidates with demonstrated creativity and research productivity in the following areas: (1) molecular or cellular immunology; (2) molecular mechanisms of basic processes or pathogenesis in microbes. Rank will be commensurate with level of experience. Interested candidates should send curriculum vitae and a statement of future research plans, and have three letters of recommendation sent by July 1, 1993, to: **Microbiology Search Committee, c/o Mary Jo Kelley, Department of Microbiology & Immunology, Box 0502, University of California, San Francisco, San Francisco, CA 94143.** *UC is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

### SENIOR ENVIRONMENTAL PLANNER

Consumers Power Company, Michigan's largest gas and electric utility and the principal subsidiary of CMS Energy Corporation, has a professional opportunity for an individual with at least five years of experience in conducting environmental assessments on gas pipeline, electric transmission line and power plant projects. Candidates must have an undergraduate and graduate degree in one or a combination of the following majors: ecology, environmental sciences, field biology. Experience in computer assisted graphics would be beneficial.

We offer a competitive salary and comprehensive benefit package. For confidential consideration, please send résumé including transcripts to: **Professional Staffing-455, Consumers Power Company, 212 West Michigan Avenue, Jackson, MI 49201.**

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# Scientific Leaders at Pfizer Central Research

*Pfizer Central Research Division is a global medical and scientific community with headquarters in Groton, Connecticut. Our expanding facility offers an unparalleled environment for professionals who want to discover innovative treatments for disease as well as their own potential.*



**DR. JEAN BEEBE, RESEARCH SCIENTIST**  
My lab studies differentiation of tumor cells and seeks to develop novel anti-cancer agents. I was particularly attracted by Pfizer's target-based approach to drug discovery. I find that

Pfizer supports women not only in philosophy but in practice.

**DR. DEBRA WILLIAMS, SR. ASSOCIATE DIRECTOR/ GROUP LEADER**

I have a background in teaching, research and clinical medicine; and fortunately, I have had

many choices. As part of clinical research at Pfizer, I am responsible for drug trials for opportunistic infections in AIDS and for clinical studies on a major new antibiotic drug. My work enables me to continue a limited clinical practice as well, and I'm convinced that I made the right decision for me and for my family.



**DR. LINDA CHATMAN, SR. PATHOLOGIST**

I always wanted to be a veterinarian, and as I became more specialized, I chose toxicological pathology. Here at Pfizer, I look for adverse effects of compounds and study the mechanism of drug action. I find that the quality of your work is what

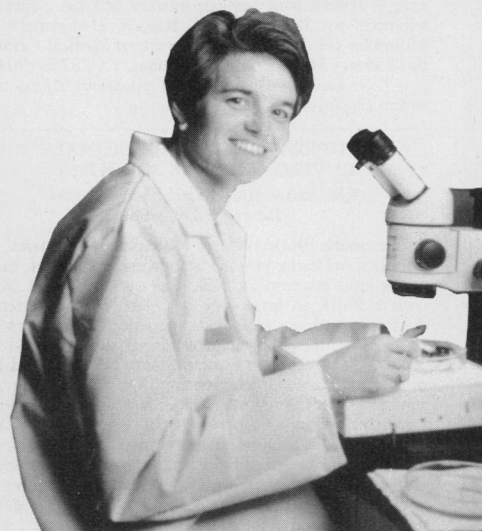
counts. My experience has been extremely positive. Pfizer provides the career path—then it's up to you.

**DR. ANABELLA VILLALOBOS, SR. RESEARCH SCIENTIST**

I always planned to go into drug discovery, and Pfizer was on the top of my list. In my area, Alzheimer's disease, there is an immediate need for innovative new drugs, and I want to be a part of that drug discovery process. My fascination with science began in high school when a single teacher who truly loved chemistry inspired me.

**DR. YUHPYNG CHEN, PRINCIPAL RESEARCH INVESTIGATOR**

As a medicinal chemist, I am currently involved in the synthesis of compounds to treat Alzheimer's, anxiety and depression. Developing research proposals that ultimately become projects is exciting—and working with great biologists is doubly rewarding. When I came to Pfizer ten years ago, there were few women chemists. Today, the number is steadily increasing, and that's the way it should be.



**DR. MELISSA TASSINARI, MANAGER**

My teratology work is an essential part of new drug discovery. Our primary concern is to

ensure that drug candidates have no adverse effects on the reproductive system. At Pfizer, I've had many terrific opportunities; and setting up a lab to conduct a full range of reproductive studies, including neurobehavioral

research, is definitely one of them. I find the team approach here to be consistent with my way of operating. That's what I like about my group—we all work toward a common goal.

*As a research-based, global health care company, Pfizer's mission is to create innovative products that improve the quality of life around the world. If you are interested in joining our dynamic scientific team, please send your resume to: Manager, Pfizer Inc, Central Research Division, Groton, CT 06340. We are an equal opportunity employer.*



**Central Research**

Bringing science to life

## POSITIONS OPEN

### DIRECTOR EUGENE McDERMOTT CENTER

The University of Texas Southwestern Medical Center at Dallas is seeking an outstanding individual to lead a center of genome research. The Eugene McDermott Center will occupy newly constructed laboratory space and be supported by a thirteen million dollar endowment (including two endowed chairs, one of which will be held by the Director) and funds from the State of Texas.

The successful applicant will continue a vigorous externally funded research program with a focus on genomic research and human genetic disease. An additional responsibility will be the recruitment of new faculty to augment the three existing members of Center.

Nominations and applications should include curriculum vitae, a statement of research interests and the names of references to: **Dr. David W. Russell, Department of Molecular Genetics, UT Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235-9046.**

UT Southwestern is an Equal Opportunity/Affirmative Action Employer.

### SUPERVISING PROFESSIONAL ENVIRONMENTAL SCIENTIST

Kissimmee and Okeechobee Systems  
Research Division

The South Florida Water Management District, an international leader in water resource management, has a senior-level position available for a scientist preferably with a Ph.D. in limnology or related aquatic science discipline and six years of experience. Two years of experience supervising a professional staff required. A proven track record in ecological research preferred (as evidenced by scientific publications). The primary responsibility of the successful candidate will be to provide leadership to and supervise staff involved in Lake Okeechobee, Kissimmee River and estuarine research. The secondary responsibility will be to contribute individually to the Division's research mission in support of aquatic resource management issues. If you have questions concerning this position, you may contact: **Dr. Nicholas Aumen, Director, Kissimmee and Okeechobee Systems Research, Telephone: 407/687-6601**, or send your résumé to the address below.

The District offers competitive salaries, excellent benefits and a smoke-free environment. New hires will be required to successfully complete a pre-placement drug test. For consideration, send your résumé INCLUDING YOUR SOCIAL SECURITY NUMBER to: **L. M. Starr, Human Resources Division, Re: SCL57130, South Florida Water Management District, 3301 Gun Club Road, West Palm Beach, FL 33416. Equal Opportunity Employer.**

### RESEARCH FACULTY POSITION Stanford University School of Medicine

The Department of Ophthalmology seeks a research faculty member to strengthen our laboratory program. Rank will be commensurate with experience; the position will be coterminous with external funding. (By University guidelines, coterminous assistant and associate professors may not be promoted.) Applicants must have a Ph.D. or M.D. degree, and appropriate research experience.

Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.

Please send curriculum vitae and the names of three references to: **Peter R. Egbert, M.D., Chairman, Department of Ophthalmology, Room A-157, Stanford University School of Medicine, Stanford, CA 94305-5308.**

**POSTDOCTORAL POSITION** in electrophysiology and attention available to join team recording brainstem and cortical neurons during attention tasks. Training in behavioral electrophysiology, psychology of attention, brainstem anatomy. Part of an interdisciplinary multi-investigator group. Computer expertise and electrophysiology experience desirable. Send curriculum vitae to: **Dr. Gary Aston-Jones, Department of Mental Health Sciences, Hahnemann University, M.S. 403, Broad and Vine, Philadelphia, PA 19102; FAX: (215) 246-5341.**

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

## POSITIONS OPEN

### UNIVERSITY OF CANTERBURY NEW ZEALAND

#### UNIVERSITY OF CANTERBURY LECTURER IN CIVIL ENGINEERING

Applications are invited for the above position in the Department of Civil Engineering from suitably qualified candidates with a specialised knowledge of environmental engineering. The appointee will be expected to expand the teaching and research in environmental topics, at undergraduate and graduate level. Applicants should have expertise in one or more of the following areas: water and wastewater treatment, solid and hazardous waste management, atmospheric pollution and wider aspects such as environmental impact assessment. The successful candidate may also be required to contribute to other civil engineering undergraduate courses.

The salary for Lecturers is on a scale from NZ\$38,000 to NZ\$49,088 per annum.

Applications close on 31 August 1993.

Further particulars and Conditions of Appointment may be obtained from the undersigned. Applications, quoting Position Number CE52, must be addressed to: **Mr. A. W. Hayward, Registrar, University of Canterbury, Private Bag 4800, Christchurch, New Zealand.**

The University has a policy of Equality of Opportunity in Employment.

#### ASSISTANT/ASSOCIATE PROFESSOR OF MEDICINE—The San Francisco General Hospital

Division of Endocrinology, Department of Medicine, University of California, San Francisco (UCSF), is recruiting for a tenure-track position clinician scientist whose research interests encompass molecular medicine and are complementary to a developing multidisciplinary program in hypertension and vascular biology. Applicants should be board certified in Internal Medicine and, preferably, in Endocrinology and Metabolism. In addition to a primary focus on research, the candidate will participate in the division's teaching and clinical activities. Please submit curriculum vitae and three letters of reference to: **Ervin Epstein, Jr., M.D., Chairperson, Endocrine Search Committee, Building 100 Room 269, SFGH, 1001 Potrero Avenue, San Francisco, CA 94110. UCSF is an Equal Opportunity/Affirmative Action Employer.**

#### BIOLOGICAL OCEANOGRAPHER

We seek a Ph.D. marine microbial ecologist for a 9-month, tenure-track position at the ASSISTANT PROFESSOR level to begin in August 1994. The position involves research, teaching at the graduate and undergraduate levels, and service. Applicants may have research interests in the microbes of either the water column or the benthos. Send a letter describing research interests, curriculum vitae, and the names, addresses and telephone numbers of three references to: **Search Committee, Department of Oceanography, Florida State University, Tallahassee, FL 32306.** Application review will begin in July 1993 and continue until a suitable candidate is found. The university is an Equal Opportunity/Affirmative Action Employer.

#### FACULTY POSITION IN BIOCHEMISTRY

The Division of Basic Medical Sciences at Mercer University School of Medicine invites application for a senior-level, tenure-track position of ASSOCIATE or FULL PROFESSOR in Medical Biochemistry. The successful applicant will contribute to an integrative, basic biochemistry curriculum in an established, problem-based medical education program and will facilitate learning in a small-group tutorial format. The applicant should have a strong background in medical education and research; candidates with a demonstrated interest in protein or lipid biochemistry are preferred. Applicants should send curriculum vitae, names of three references and a statement of philosophy on the role of teaching and research in medical education to: **Dr. Robert J. Moon, Division of Basic Medical Sciences, School of Medicine, Mercer University, Macon, GA 31207. Equal Opportunity/Affirmative Action Employer.**

## POSITIONS OPEN

### POSTDOCTORAL POSITION IN NMR SPECTROSCOPY

A POSTDOCTORAL POSITION in cardiac nuclear magnetic resonance (NMR) spectroscopy is available starting summer 1993 at the Massachusetts General Hospital and Harvard Medical School. General emphasis in this program is on dynamic NMR and stable isotope evaluations of the metabolic support of cardiac function in normal and diseased hearts. The MGH-NMR Center offers an attractive and interactive scientific research environment, with local collaborations between Harvard and MIT. The facility currently houses several research magnets for spectroscopy and imaging at 9.4 T, 4.7 T, 2.0 T, 6.0 T, and two 1.5 T whole body systems. A 3.0 T magnet system for human spectroscopy/imaging is now being included. Additional space and facilities are dedicated to the cardiac metabolism/physiology research program. Candidates should hold an M.D. or Ph.D. with background in NMR spectroscopy, biochemistry, or physiology. Interested applicants should send curriculum vitae and arrange for three letters of reference to be forwarded to:

**E. Douglas Lewandowski, Ph.D.  
Massachusetts General Hospital  
NMR Center  
Building 149, 13th Street  
Charlestown, MA 02129**

A POSTDOCTORAL POSITION is available to study plant pre-mRNA splicing using molecular and biochemical approaches to define *cis*- and *trans*-acting factors involved in the recognition of AU-rich introns. Experience in the molecular analysis of RNA binding proteins or RNA splicing is desirable. Another position is available to study insect P450 monooxygenases with the aim of defining the catalytic site in an insect furanocoumarin-metabolic P450 using baculovirus or *E. coli* expression vectors. Experience with molecular biology/biochemistry is desirable. Please send curriculum vitae and names of three references to: **Dr. Mary A. Schuler, University of Illinois (UIUC), Department of Plant Biology, 190 PABL, 1201 West Gregory Drive, Urbana, IL 61801.**

UIUC is an Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITION, Ph.D.** (physiology, animal science, experience with cell and molecular techniques) for work in intestinal growth and development as influenced by growth factors and nutritional mitogens. Experience in intestinal function and in handling experimental animals would be helpful. Send curriculum vitae and three letters of recommendation to: **David L. Dudgeon, M.D., Pediatric Surgical Laboratory, Division of Pediatric Surgery, Case Western Reserve University, School of Medicine, Rainbow Babies and Childrens Hospital, 2074 Abington, Room 122, Cleveland, OH 44106.**

Case Western Reserve University is an Equal Opportunity/Affirmative Action Employer.

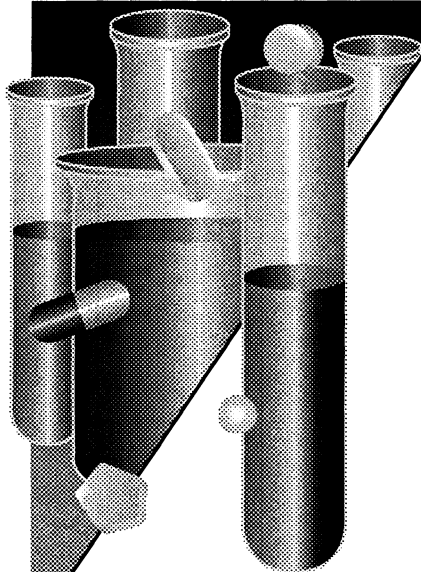
**POSTDOCTORAL POSITION** available immediately to study repair of ultraviolet radiation-induced DNA damage in germinating *Bacillus subtilis* spores, in the laboratory of **Wayne L. Nicholson, Ph.D.** A Ph.D. degree and research experience in molecular biology, protein biochemistry, or bacterial genetics is required. Send curriculum vitae and the names of three references to: **Human Resource Services, Texas College of Osteopathic Medicine, 3500 Camp Bowie Boulevard, Fort Worth, TX 76107; Telephone: (817) 735-2690, FAX: (817) 735-5000.**

TCOM is an Equal Opportunity/Affirmative Action Employer/Educator.

**POSTDOCTORAL POSITION** available immediately to conduct electrophysiological and pharmacological studies of the inositol phosphate cascade in photoreceptors. Please submit curriculum vitae and three letters of recommendation to:

**Alan Fein, Ph.D.  
Department of Physiology MC3505  
University of Connecticut Health Center  
Farmington, CT 06030**

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# A DYNAMIC MISSION

*At the Glaxo Inc.  
Research Institute,  
Our Priority is Progress.*

In Research Triangle Park, NC, the inspirational Sir Paul Girolami Research Center houses the new Glaxo Inc. Research Institute. Here, professional excellence teams with scientific leadership in a unified mission: to advance the progress of drug discovery and development. The result is an environment of exceptional challenge...and unsurpassed reward.

By way of our Postdoctoral Fellowship Programs, we support scientific endeavor and scholarship through the development of researchers at the early stage of their careers. We are currently seeking to fill **five openings** for:

## POSTDOCTORAL FELLOWS

- **Apoptosis, Cell Cycle Control, and DNA Repair**

Individual will explore an aspect of p53 in carcinogenesis, cell cycle check point control, apoptosis and DNA repair. The successful candidate will create mouse models utilizing transgenic and ES cell technologies to express normal and mutant forms of p53 and will collaborate with Glaxo and academic scientists working on the biochemistry of cell cycle control and DNA repair. Experience in molecular genetics and a keen interest in cell cycle control and apoptosis are required. **Please refer to Job # ASC911701 on all resumes.**

- **Intracellular Trafficking and Secretion**

Individual will study mechanisms of intracellular trafficking, processing and secretion of cytokines important in the regulation of the inflammatory response. Strong background in intracellular protein trafficking, processing or secretion is required. An interest in immunoregulation and inflammation is desirable. **Please refer to Job # ASC911702 on all resumes.**

- **Signal Transduction Pathways**

Individual will join a multi-disciplinary team studying the role of SH2, SH3, and catalytic domains of src-tyrosine kinase in oncogenesis. Protein chemistry and biophysical techniques will be used to define the nature and interactions of the catalytic and ligand binding properties of src-tyrosine kinase. Experience in enzymology, protein chemistry and biophysical techniques is required. Experience in signal transduction is beneficial. **Please refer to Job # ASC911703 on all resumes.**

- **Structural Studies of DNA-Binding Proteins**

Individual will investigate the regulation of gene expression through studies aimed at solving the tertiary structure of transcription factor - DNA complexes. Experience in protein purification and protein crystallography is required. **Please refer to Job # ASC911704 on all resumes.**

- **Structure/Function Studies of G-Protein Coupled Receptors**

Individual will join a multi-disciplinary research team investigating the structure/function relationships of seven transmembrane cell surface receptors. Candidate must have a background in molecular biology and protein structure with experience in one or more of the following areas: in vitro mutagenesis, gene expression, DNA sequencing, receptor-ligand interactions, molecular modeling or X-ray crystallography. **Please refer to Job # ASC911705 on all resumes.**

All candidates will have distinguished themselves by academic scholarship and excellence in research leading to the award of a Ph.D. in a relevant life science area within the past three years. Appointments will be made for two years with possible extension to third and final year upon favorable internal review and recommendation.

These Fellowship openings offer you the opportunity to strengthen your scientific reputation and career advancement by publication and presentation of outstanding research conducted in an excellent environment. In addition, Glaxo is proud to offer a highly competitive compensation package. Applicants should send their curriculum vitae, a statement of research interest, a list of professional references, and the Job # of interest, 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.

*The Time For Achievement Is Now*

## PRESIDENT JOINT OCEANOGRAPHIC INSTITUTIONS INCORPORATED

Applications and nominations are invited for the position of President of Joint Oceanographic Institutions Incorporated (JOI). Of special interest are candidates who have demonstrated senior leadership in the ocean and earth sciences community. Upon the confirmation of the present President as the NOAA Administrator, the position of President of JOI will become available.

Formed in 1976, JOI is a private non-profit corporation comprising ten U.S. oceanographic institutions which plans and manages joint research efforts, and facilitates scientific ocean drilling and oceanographic research in general. JOI manages the scientific planning and operations of the international Ocean Drilling Program and supports the U.S. science community's participation, under an NSF contract. JOI also supports NSF, NASA, ONR, NOAA, and other federal agencies in the development and execution of research programs and interaction with the oceanographic community.

JOI is located in Washington, D.C. The President reports to a Board of Governors comprising one representative from each U.S. member institution. Principal qualifications include demonstrated senior leadership, strong scientific or technical qualifications in the ocean sciences or related fields, management experience with large scientific programs, and proven ability to work effectively with national and international organizations and agencies on behalf of the U.S. scientific community.

Nominations of qualified persons and applications from individuals are encouraged. Submit cover letter, resume, and names and addresses of five professional references to **Dr. Craig E. Dorman, Chairman, JOI Board of Governors, c/o Woods Hole Oceanographic Institution, Woods Hole, MA 02543, or fax to 508-457-2190.** Applications and nominations will be considered beginning in late June 1993, and thereafter until the position is filled. *JOI Inc. is an equal opportunity employer, M/F/V/H.*

## Medical Director for Bone Marrow Processing Laboratory

The University of Utah's Department of Pathology is recruiting a Medical Director/Technical Director for the Bone Marrow Processing Laboratory. The candidate should have an M.D. and/or Ph.D. degree with documented experience in hematopoietic precursor or human blood manipulation, preferably with experience in clinical bone marrow processing. She/he will be responsible for the clinical bone marrow processing service for the University of Utah Bone Marrow Transplant Program, which is currently transplanting patients with unrelated, related allogeneic, and purged and unpurged autologous marrow. The candidates responsibility will also be to provide technical leadership to the Marrow Processing Laboratory's two technicians, and be responsible for Q.A. of utilized laboratory procedures. It is expected that the candidate has a background necessary to implement new procedures relating to stem cell processing, in particular, as it applies to positive selection of human stem cells and/or purging of marrow and peripheral blood stem cells of tumor cells. It is expected that the candidate as a faculty member of the University of Utah will conduct his/her research in the area of human stem cell manipulation. The University of Utah has an active basic science consortium looking into optimal ways of isolating and genetically manipulating human stem cells. The ideal candidate would have research that would interact with the basic science gene manipulation program, to bring such technology into clinical practice. Interested persons should send a detailed curriculum vitae, an outline of current clinical and research interests, and names and addresses of three people who can be contacted for references. The University of Utah is an equal opportunity/affirmative action employer. **Harry R. Hill, M.D., University of Utah, Department of Pathology, 50 North Medical Drive, Salt Lake City, Utah 84132.**

## POSITIONS OPEN

**POSTDOCTORAL POSITIONS** available immediately to study the RNA-protein interactions and design of artificial proteases. (1) **Bioorganic/Bioinorganic Chemist:** projects involve the synthesis of modified amino acids and nucleotides. Experience in synthetic chemistry is required; protein/nucleic acid biochemistry desirable. (2) **Molecular Biologist/Biochemist:** projects involve the determination of nucleic acid sequences that specifically interact with proteins in HIV. Experience in the *in vitro* manipulation and amplification of both RNA and DNA is required. Send curriculum vitae and three letters of reference to: **Dr. Tariq M. Rana, Department of Pharmacology, UMDNJ—Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854-5635.** *UMDNJ is an Affirmative Action/Equal Opportunity Employer, M/F/H/V.*

## POSTDOCTORAL POSITION ECOLOGICAL GENETICS

A postdoctoral position is available September 1, 1993, or until filled. Studies involve population and ecological genetics of freshwater molluscs and fish, especially as they relate to environmental toxicology and species distribution. Candidate should have experience with DNA techniques (sequencing, RFLP, fingerprinting, etc.) and appropriate computer software. *Applicants must be U.S. citizens.* Send curriculum vitae, names of three references, and reprints by June 30, 1993, to: **Margaret Mulvey, Savannah River Ecology Laboratory (University of Georgia), P.O. Drawer E, Aiken, SC 29802.** *The University of Georgia is an Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** is available July 1, 1993, for two years to study a unique component of the renin angiotensin system. Work will involve determining the site of synthesis and establishing model systems for studying the syntheses of this component. Experience in molecular biology and cell culture techniques is desired. Submit letter of application, curriculum vitae, and names, addresses and telephone numbers of three references to:

**Employment Specialist  
Marshfield Clinic  
1000 North Oak Avenue  
Marshfield, WI 54449**

*Affirmative Action/Equal Opportunity Employer, M/F/H/V.*

**POSTDOCTORAL POSITION:** Available immediately to study the genetics of interactions between host and bacteria (*Xanthomonas* and *Rhizobium*) in common bean via QTL mapping (see Nodari et al. *Genetics* 133:241-250). Depending on the interest of the candidate, additional areas can also be considered such as physical mapping and evolution of small multigene families in the bean genome. Ph.D. in breeding, genetics, biology, or related area; knowledge of molecular biology an asset. Submit letter of application including brief statement of research interest, curriculum vitae, and names, addresses, and telephone numbers of three references to: **Paul Gepts, Department of Agronomy and Range Science, University of California, Davis, CA 95616-8515, Telephone: (916) 752-7743; FAX: (916) 752-4361.**

## POSTDOCTORAL POSITION

Position available for recent Ph.D. or M.D. to study ganglioside expression and biosynthesis in tumor cells, including cloning of glycosyltransferase genes. Experience in molecular biology and an interest in carbohydrate antigens required. Please send curriculum vitae and names of three references to: **Kenneth O. Lloyd, Ph.D., Immunology Program, Sloan-Kettering Institute, 1275 York Avenue, New York, NY 10021.** *Equal Opportunity Employer.*

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## POSITIONS OPEN

**POSTDOCTORAL AND RESEARCH ASSOCIATE POSITIONS** are available immediately for research on mechanisms of learning and memory and/or biological clocks. We are particularly interested in individuals with experience in biochemistry and molecular biology. With exceptional qualifications, it is possible that a **RESEARCH ASSISTANT PROFESSOR** position will be made available. Research is carried out in spacious new labs with ample possibilities for interactions with others in a strong Biochemistry Department and the excellent scientific community of the Houston Medical Center. The learning and memory research involves collaborative projects with **Dr. J. H. Byrne** at the University of Texas Health Science Center. Applicants should submit curriculum vitae and names of three references to: **A. Eskin, Department of Biochemistry, University of Houston, Houston, TX 77204-5934.**

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

**POSTDOCTORAL FELLOW EMORY UNIVERSITY.** A position is open to participate in ongoing studies of transcriptional regulation of insulin-like growth factor-1 (IGF-1). Applicants should have experience with cell culture, subcloning, and characterization of DNA-protein interactions. Please send curriculum vitae and names and addresses of three references to: **Lawrence S. Phillips, M.D., Director, Division of Endocrinology and Metabolism, Emory University School of Medicine, 69 Butler Street, SE, Atlanta, GA 30303.** *An Equal Opportunity Employer.*

## PHYSICIST— IONIZING RADIATION DOSIMETRY

The Radiation Biophysics Department, Armed Forces Radiobiology Research Institute (AFRRI), is seeking a highly qualified senior-level **PHYSICIST** to provide scientific leadership in the conduct of the radiation physics program, serve as technical expert/advisor to AFRRI staff on ionizing radiation measurements in military operational settings, and play a key role in forming military radiation protection policy and programs and in identifying new military research requirements in radiobiological science. Applicants should have recognized professional stature in the ionizing radiation science community; and show mastery of advanced concepts in physical dosimetry techniques for neutron, gamma ray and high-energy electron fields. **Must have extensive experience in a broad range of ionizing radiation dosimetry applications, including in-beam high dose rate measurements, field measurements at low dose rates, and laboratory measurements employing sophisticated electronic ionizing radiation detection equipment.** Federal Government, GM-13 level (\$47,920 to \$62,293 per annum). *U.S. Citizenship required.* Contact: **Civilian Personnel Office (301/295-1426)** for copy of AFRRI Bulletin #009/93, or send SF-171, resume, or curriculum vitae to: **Armed Forces Radiobiology Research Institute, ATTN: CPO (Mr. M. Ward), 8901 Wisconsin Avenue, Bethesda, MD 20889-5603.** Application deadline: 18 June 1993. *An Affirmative Action/Equal Opportunity Employer.*

**ASSOCIATE VIROLOGIST.** Position will involve the *in vitro* cultivation of cell cultures, the restarting of cultures and the preparation of virus pools. Position also involves performing experiments with virus-cell systems, the use of viruses or virus antigens for the stimulation of immune response in animals, and the performing of immunological assays and immunofluorescent antibody tests. Additional duties include training junior staff member and the operation of technical equipment involved in the processing of specimens. Requires Master's Degree in Microbiology with one year of experience in Virology. Experience should include hands-on operation of a variety of technical equipment involved in the processing of viruses and cells, such as CO2 incubators, centrifuge, sonicator, and balances. Requires previous experience with the handling of class 1 and class 2 biohazardous agents and previous experience with herpes simplex viruses, cytomegalovirus, immunological assays, and immunofluorescent antibody tests. 7:45 a.m. to 4:30 p.m., 40 hours per week. Salary \$1,850 per month. Contact: **Sandra T. Starnes, Alabama State Employment Service, 3440 Third Avenue South, Birmingham, AL 35222.** RE: Job Order #4074164.



Pharmaceutical  
Division

## Institute For Molecular Biologicals

**M**iles, Inc., Pharmaceutical Division, a rapidly expanding, highly progressive company, offers exceptional growth and advancement opportunities. Join our team oriented, interdisciplinary environment in West Haven, CT.

We currently have several research positions available in our Institute for Molecular Biologicals. In these positions you will participate in discovery research to identify and characterize novel therapeutic proteins.

### MOLECULAR BIOLOGY AND GENE EXPRESSION

We are looking for two **Senior Associate Research Scientists** to carry out research in the areas of cloning and expression of genes using mammalian and yeast expression systems. The successful applicants will have extensive experience in several areas of recombinant DNA technology such as gene cloning, library and vector construction and screening, DNA sequencing, RNA transcription analysis, in vitro mutagenesis, PCR methodology, mammalian cell culture and analysis of expressed gene products. You will also be involved in the development and/or application of specific assays for the optimization of gene expression.

A MS degree with 2 years' experience or a BS degree with 4 years of experience is required. Experience in mammalian cell culture is a must. Knowledge of yeast molecular biology is desirable for one of the positions. Excellent interpersonal and communication skills are necessary.

### PROTEIN BIOCHEMISTRY

We are looking for an **Associate Research Scientist** to participate in investigations into the interactions of growth factors and cytokines with their receptors. The successful applicant will have proven experience in Protein Biochemistry, particularly ligand receptor binding and analysis, SDS-PAGE and Western blotting, immunoprecipitation, enzymatic assays, and protein purification. You must also have a working knowledge of molecular biology techniques, such as subcloning, sequencing, mutagenesis and PCR.

The candidate should have a MS degree or a BS degree and at least 2 years of experience.

### C E L L B I O L O G Y

We are looking for an **Associate Research Scientist** to carry out research to identify and characterize novel cytokines, growth factors, and their receptors. The successful candidate should have proven experience in mammalian cell biology, including maintenance of cell lines, transfection and characterization of modified cell lines, primary tissue cell culture, and bioassay development. You must also have a working knowledge of molecular biology techniques, such as subcloning, DNA sequencing, mutagenesis, and PCR.

The candidate should have a MS degree or a BS degree and at least 2 years of experience.

We offer attractive compensation commensurate with qualifications, generous benefits, and an excellent opportunity for personal growth and professional satisfaction. Resumes, including salary history and position of interest should be forwarded to **Miles, Inc., Pharmaceutical Division, Dept. ELRD, 400 Morgan Lane, West Haven, CT 06516.**

### Departments of Botany & Geography University of Alberta Edmonton, Alberta

Applications are invited for a tenure track position at the assistant professor rank in the area of Plant Ecology/Biogeography. The position is to be jointly held in the two departments and the successful candidate will be expected to have a commitment to teaching at the undergraduate and graduate levels in both departments. The current salary range for the assistant professor rank is \$40,035 to \$57,003.

Qualifications for this position include a PhD, an active research program and a record of significant scientific contributions. Expertise in Western Plains or Northern Terrestrial Systems is preferred. Of special interest are contemporary or paleoecological research at the community, landscape or ecosystem level. With the letter of application, candidates should send a curriculum vitae, a description of research interests, and arrange for three letters of reference to be sent either:

Dr. M. R. T. Dale  
Department of Botany  
University of Alberta  
Edmonton, Alberta  
T6G 2E9

or

Dr. J. Shaw  
Department of Geography  
University of Alberta  
Edmonton, Alberta  
T6G 2H4

In accordance with Canadian Immigration requirements priority will be given to Canadian citizens and permanent residents of Canada.

The closing day for applications is September 1, 1993. The date of appointment is flexible.

Women eligible for a NSERC Women's Faculty Award are encouraged to apply.

The University of Alberta is committed to the principle of equity in employment. The University encourages applications from aboriginal persons, disabled persons, members of visible minorities, and women.

### National Institute of Arthritis and Musculoskeletal and Skin Diseases National Institutes of Health

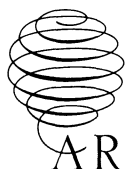
## RESEARCH POSITION

A research position is available at the National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, Public Health Service: an investigator whose program will compliment ongoing research on the mechanisms of signal transduction in immune cells. This position is for an individual experienced in protein biochemistry, biophysics and molecular genetic techniques. Salary is \$42,000 to \$56,000 per year, depending on experience. Send CV, several reprints, summary of research interests, and names of three references to:

Dr. Henry Metzger  
NIAMS, NIH  
Building 10, Room 9N228  
9000 Rockville Pike  
Bethesda, MD 20892



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ARIAD

**PRINCIPAL SCIENTIST/GROUP LEADER  
Thrombosis/Platelet Biochemist**

ARIAD Pharmaceuticals, a leading second-generation biopharmaceutical company, is seeking a highly motivated Principal Scientist who will take a leadership role in our thrombosis/hemostasis program. The successful candidate will have a thorough understanding of the biochemical and physiological properties of platelets, particularly as they relate to the hemostatic system, and will be responsible for designing and evaluating assay systems to characterize and assess the effects of novel molecules being developed for the treatment of vascular disease, especially thrombocytopenia. The position will interact extensively with biologists, chemists, pharmacologists and clinicians in the Company's research and development programs.

Applicants should have a Ph.D. in biochemistry or related field and 5 to 10 years of academic or industrial experience. Excellent oral and written communication skills are required. ARIAD offers an excellent salary and benefits package, incentive stock participation and the opportunity to contribute to a new and exciting area of drug discovery.

Interested individuals should send a resume and the names of three references to: ARIAD Pharmaceuticals, Job Code: JI, 26 Landsdowne Street, Cambridge, MA 02139. Please include job code on the envelope.

ARIAD is an equal opportunity employer.

# Research Scientists

An innovative new biopharmaceutical company focused on research into receptor-ligand interactions in the central nervous system and the development of new therapeutic agents resulting from this research is seeking highly motivated professionals to add to our outstanding scientific team. Current opportunities include two senior scientist positions:

- **MOLECULAR PHARMACOLOGY**
- **ELECTROPHYSIOLOGY**

We are seeking two senior scientists who are interested in working in the field of channel receptors using recombinant or electrophysiological approaches, respectively. The successful candidates will have a Ph.D. in molecular biology or electrophysiology and at least 2 years of postdoctoral experience in neuropharmacology preferred. Candidates with some industrial experience are desired.

We provide a high quality working environment, competitive salaries and fringe benefits. Send resume in strictest confidence to: **Personnel Director, CoCensys, Inc., 213 Technology Drive, Irvine, CA 92718**. CoCensys is an equal opportunity employer.



**Ph.D. TRANSPLANTATION IMMUNOLOGIST  
Ph.D. TRANSPLANTATION CELL BIOLOGIST  
Ph.D. CHEMICAL OR BIOCHEMICAL ENGINEER  
RESEARCH ASSOCIATES**

Neocrin Company is a rapidly growing leader in the field of cellular transplantation for the treatment of diabetes. We seek innovative, problem-solving, Ph.D.-level scientists and engineers with skills and experience in islet transplantation biology, islet transplantation immunology, and cell isolation and purification.

Our dynamic team is developing a biohybrid artificial pancreas. In collaboration with biomaterials scientists and engineers, the transplantation scientists will design and carry out research programs to assess and overcome the immune response of test animals to the biohybrid artificial pancreas device. The chemical engineer will develop an islet cell isolation, separation and purification process. Each position requires a Ph.D. and 5 years of postdoctoral or biotechnology/pharmaceutical industry experience.

Experienced research associates are sought in the following skill areas: pancreatic islet isolation, cell separation and purification, tissue culture, histology, media preparation, veterinary surgery, bioengineering, and analytical biochemistry. These positions require bachelor's or master's degrees and several years experience in one or more of the above areas, as well as computer literacy.

We offer a competitive salary and full benefits, including relocation assistance. Please mail or FAX your resume to:

**Human Resources Department  
NEOCRIN COMPANY  
31 Technology Drive, Suite 100  
Irvine, CA 92718  
FAX: (714) 727-1718**

Affymax Research Institute is an innovative venture dedicated to the development of new technologies which will accelerate the process of drug discovery. We offer a creative and stimulating environment for talented people and have the following positions available:

**Staff Scientist-Receptor Pharmacology**

Will identify receptor ligands from combinatorially assembled compound libraries. Duties will include biochemical characterization of recombinant cell surface receptors and development of screening strategies & assays for testing biological activities of lead compounds. Requires a Ph.D. and 2+ years of postdoctoral experience in cell surface receptor biochemistry. (Job Code KK106)

**Staff Scientist-Assay Development**

Will optimize methods of screening solid-phase compound libraries using model systems. Duties will include protein purification/characterization, covalent coupling of peptides to solid supports, solid-phase binding assays and kinetic analyses, and high sensitivity-fluorescence detection. Requires a Ph.D. in a biological or chemical discipline with at least 2 years experience in solid-phase assay development. Industrial experience in a team oriented research environment is desired. (Job Code RB112)

**Postdoctoral Fellow-Receptor Biology**

Will explore new methods of using combinatorially-assembled compound libraries to discover receptor ligands. Requires a recent Ph.D. in biological sciences with experience in methods for studying cell-surface receptors. (Job Code RB130)

Affymax offers a competitive compensation package as well as many of the benefits of a world class academic environment and the potential to develop new therapeutics. To apply, please send your resume with appropriate job code to: **Affymax Research Institute, Human Resources Dept., 4001 Miranda Avenue, Palo Alto, CA 94304**. EOE



National Institute of Allergy and Infectious Diseases  
National Institutes of Health

## PROTEIN X-RAY CRYSTALLOGRAPHER

A protein crystallography laboratory is being established with intramural funding to conduct an original research program and to interact with other scientists within the NIH intramural program. Ph.D. or M.D. applicants should have a record of achievement in solving protein structures by X-ray crystallography. Salary commensurate with credentials and research experience.

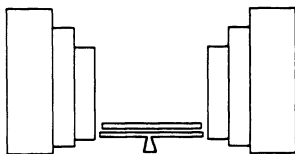
Qualified and interested candidates should send curriculum vitae and names and addresses of three references to:

**John E. Coligan, Ph.D.**  
**Chief, Biological Resources Branch**  
**NIAID, NIH**  
**Bldg. 4, Room 413**  
**9000 Rockville Pike**  
**Bethesda, MD 20892**  
**(301) 496-3213 phone**  
**(301) 402-0284 fax**



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## PLANT BIOLOGY AT THE SALK INSTITUTE

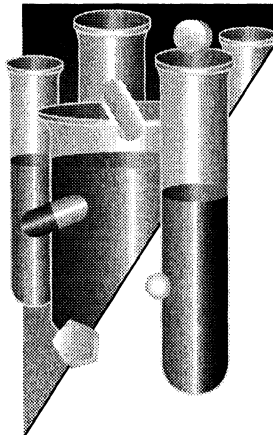


The Salk Institute for Biological Studies

The Salk Institute for Biological Studies is seeking applications for a faculty position at the Assistant Professor level in the Plant Biology Laboratory. The successful candidate will be expected to establish an independent research program using genetic, molecular or biochemical approaches to fundamental problems in plant biology. The Salk Institute maintains an interactive program in cancer biology, gene expression, nucleotide and peptide chemistry, signal transduction, molecular neurobiology, plant biology and AIDS. Qualified candidates should send a curriculum vitae, a short statement of research interests and scientific goals, reprints of key publications, and the names and addresses of at least three individuals familiar with your work.

Dr. Joanne Chory and Dr. Chris Lamb  
Co-Chair, Plant Biology Search Committee  
Salk Institute for Biological Studies  
10010 North Torrey Pines Road  
La Jolla, California 92037

*The Salk Institute is an Affirmative Action Employer*



## A DYNAMIC MISSION

**At the Glaxo Inc.  
Research Institute,  
Our Priority is  
Progress.**

In Research Triangle Park, NC, the inspirational Sir Paul Girolami Research Center houses the new Glaxo Inc. Research Institute. Here, professional excellence teams with scientific leadership in a unified mission: to advance the progress of drug discovery and development. The result is an environment of exceptional challenge . . . and unsurpassed reward.

We invite you to be part of our Research & Development team in the following opening.

## TOXICOLOGIST Drug Safety Assessment

While assisting Senior Toxicologists, the selected individual will be responsible for the planning, execution, interpretation and reporting of general toxicology studies to include the monitoring of contracted safety assessment studies.

Candidates should possess a B.S. or M.S. Degree (or Ph. D. and 2 years experience) in Toxicology or a related area, with a minimum of 3-6 years relevant experience of which 2 years is experience in conducting GLP toxicology studies in the pharmaceutical or contract industries.

At Glaxo, pride in our people is reflected in an excellent salary and a flexible benefits package, as well as in such amenities as an on-site fitness center and a work setting in which you will take pride. Research Triangle Park, NC offers an academically enriched quality of life complete with a host of cultural and recreational advantages. For confidential consideration, send your resume, which must include position title and salary history, to: **Human Resources Department, Job # ASC917703, 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.

*The Time For Achievement Is Now*

## Research Scientist Invertebrate Pest Control

A leading agricultural products company is seeking a Ph.D. level scientist with a strong interest and research experience in crop protection research for a position in their Invertebrate Pest Control Group. Candidates should have:

- Ph.D. degree in Entomology or related discipline
- Demonstrated record of accomplishment in Hemiptera biology, with a specialization in Aphidology
- Research accomplishments in the chemical ecology of Hemiptera/host plant interactions, focusing on host plant recognition, selection and feeding by insects
- Experience in the application of electrophysiological techniques to study Homoptera feeding behavior
- Experience in the use of chemical/physical parameters in developing models of chemical/plant interactions
- Experience in the design, execution and analyses of laboratory assays and field efficacy evaluations of developmental and experimental pesticides vs commercial standards
- Experience in evaluation of combinations of alternative control strategies for sap feeding insects; and in insect bionomics
- Strong background in plant sciences, especially Agronomy, Crop Physiology, Plant Virology and Insect Vectors of Disease
- Demonstrated practical experience of global agricultural practices, especially in Europe and Africa; and in application of knowledge to solving problems in agriculture worldwide.

The successful candidate will become a member of a multidisciplinary research team focused on the development of innovative insect control strategies. We seek an individual who is creative, has value for environmental integrity and believes that science-based solutions for crop protection and crop production will have positive impact on the quality of life.

The position is located at our mid-Atlantic facility. Application deadline is June 30, 1993. Interested candidates are invited to forward their resumes and three references to:  
Dept. RS-TH, Box 28, 834 Chestnut Street, Philadelphia, PA 19107

An Equal Opportunity Employer

# MIT

## Faculty Position Department of Brain and Cognitive Sciences

Behavioral neurophysiologist with research focus on the primate visual or visuomotor system is sought for a tenure track position. Candidate must have the ability to develop a strong research program and to teach at both the undergraduate and graduate levels.

The deadline for applications is September 1, 1993. Send inquiries to:

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Committee**

**Department of Brain and Cognitive  
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Bldg. E25-406**

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## DIRECTOR OF CLINICAL/ HOSPITAL LABORATORIES DEPARTMENT OF PATHOLOGY THE UNIVERSITY OF CHICAGO PRITZKER SCHOOL OF MEDICINE

The University of Chicago Department of Pathology has an immediate opening for a Director of Clinical/Hospital Laboratories. The 633-bed University of Chicago Hospitals record 180,000 patient days and 370,000 outpatient/ER visits per year. The responsibilities of this position are to manage and coordinate the delivery of all clinical laboratory services provided at The University of Chicago Hospitals and to promote research and teaching of Pathology fellows, residents, and medical students in laboratory medicine. The Director of Clinical/Hospital Laboratories will report directly to the Chairman of the Department of Pathology.

Candidates must be academically qualified for this faculty position which places strong emphasis on teaching, scholarly activity evidenced by appropriate publications, be nationally recognized for their work, and have evidence of current and ongoing investigation in an area of expertise. Appropriate prior administrative experience including an interest in laboratory utilization is essential.

Applicant must be certified by the American Board of Pathology in Clinical or Anatomic Pathology, and preferably have certification of special competence and proven expertise in a subspecialty.

Salary will be competitive and negotiable. Excellent benefit package included. Applicants should send their curriculum vitae, bibliography, and names of 3 references to:



Godfrey S. Getz, M.D., Ph.D.  
Professor and Chairman  
**THE UNIVERSITY OF CHICAGO**  
Department of Pathology, MC 3083, Rm. S-329  
5841 S. Maryland Ave.  
Chicago, IL 60637

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## IRCM

Institut de recherches cliniques de Montréal  
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The Institut de recherches cliniques de Montréal (IRCM), one of the largest biomedical research institutions in Canada, is seeking some American post-doctoral fellows (M.D. or Ph.D.) wishing to work in Montreal in a very stimulating environment. The applicants will be expected to work in the following fields: AIDS, atherosclerosis, bioengineering, bioethics, cancer, endocrinology, gene expression, hypertension, immunology, neurosciences (pain, memory, brain chemistry) and retrovirology.

Applications with curriculum vitae and three references should be forwarded to Dr. Michel Chrétien, Scientific Director, Institut de recherches cliniques de Montréal, 110 Pine Avenue West, Montreal, Canada H2W 1R7.

# CELL AND MOLECULAR BIOLOGY

## Postdoctoral Positions

Postdoctoral positions are available at the Worcester Foundation for Experimental Biology to study cellular and molecular aspects of development. These positions are supported by an NIH Training Grant and individual investigator awards. The faculty and their research interests are:

**F. Rob Jackson:** Molecular genetic analysis of circadian rhythms and other neural functions in *Drosophila*.

**Daniel Kilpatrick:** Cell-specific transcriptional regulation during differentiation of spermatogenic and somatic cells.

**Elizabeth Luna:** Structure and regulation of cytoskeleton-membrane attachment.

**Clare O'Connor:** Regulation of protein stability during gametogenesis.

**Thoru Pederson:** Molecular and cell biology of gene expression, with emphasis on RNA-protein interactions and RNA processing.

**Joel Richter:** Gene expression during early *Xenopus* development.

**Alonzo Ross:** Nerve growth factor receptors and differentiation of neural tumors.

**Greenfield Sluder:** Timing and molecular control of mitotic events during early development.

**Richard Vallee:** The role of microtubule motors in mitosis and organelle transport; the role of GTPases in receptor-mediated endocytosis.

**Yu-li Wang:** Assembly and dynamics of actin and myosin in living cells.

**George Witman:** Molecular basis for flagellar movement; sensory transduction in *Chlamydomonas*; control of sperm maturation and capacitation.

**David Wolf:** Structure, function, and dynamics of nerve growth factor receptor.

**Paul Zamecnik:** Synthesis of modified oligonucleotides for chemotherapy.

Send curriculum vitae and names of references to the faculty member(s) of interest, c/o Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, MA 01545, USA.

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## Worcester Foundation for Experimental Biology

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**Dr. B. Horwitz, Bldg. 10, Rm 6C-414  
Laboratory of Neurosciences  
National Institute on Aging  
9000 Rockville Pike, Bethesda, MD 20892.  
Tel. 301-496-4754; FAX: 301-402-0595;  
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## SENIOR INVESTIGATOR

The Laboratory of Molecular Cardiology, National Heart, Lung, and Blood Institute, invites applications for a position as post-doctoral, tenure-track position (Salary range: \$40,000 to \$50,000). The overall theme of the laboratory is understanding the molecular basis of nonmuscle and smooth muscle myosin function.

The applicant must hold a Ph.D. and/or M.D. degree and have at least four (4) years of relevant postdoctoral experience in the identification and characterization of drosophila and murine homeobox genes and gene products with an interest in studying the role of these genes in neuromuscular development. U.S. CITIZENSHIP IS REQUIRED. Send C.V. and three (3) letters of recommendation to:

**Dr. Robert S. Adelstein**  
**Laboratory of Molecular Cardiology**  
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**National Institutes of Health**  
**9000 Rockville Pike**  
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**ZENECA Pharmaceuticals Group** (formerly ICI Pharmaceuticals Group), dedicated to the challenge of discovering and developing important new therapeutic agents, has openings in the CNS and Pulmonary Pharmacology drug discovery research groups at our suburban Wilmington, Delaware location.

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The successful candidates will participate in molecular biological studies as part of an integrated team of biologists who interact closely with medicinal and molecular modeling chemists. Both positions require expertise in construction/expression of vectors for transient and stable mammalian cell expression and experience with mutagenesis techniques. Expression cloning of low abundance mRNA and genomic cloning is required.

**SENIOR RESEARCH PHARMACOLOGIST** — We seek a Pharmacologist to participate in and supervise molecular biological approaches, including cloning of drug therapy targets and their genetic manipulation. The successful candidate should have a PhD in molecular biology, molecular genetics, pharmacology, or biochemistry, with at least 2 years' postgraduate experience. Broad knowledge and experience in PCR are required.

**SENIOR PHARMACOLOGIST** — BS/MS in molecular biology, molecular genetics, pharmacology, or biochemistry, with at least 2 years' relevant experience in one or more areas of PCR is required.

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# ZENECA

### Pharmaceuticals Group

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**RESEARCH TECHNOLOGIST B** for northeast Ohio nonprofit medical research/treatment facility, to work in biomedical laboratory using precision instruments and applying principles of laser and electronic technology to construct and assemble laser ablation system; undertake clinical trial for and troubleshoot laser ablation system; construct and test a laser-introduced fluorescence diagnostic technique; assemble, implement and modify a fiber optical system; modify software to control operation of real time data acquisition; modify laser ablation system using computer aided design. No experience required in above duties, but applicants will qualify with a B.S. in any science or science-related major (must have taken one course each in applied optical design, optical elements making process, and precision machine design) and 6 months of experience as a Research Assistant (experience must be in a biomedical laboratory using *in vivo* techniques to study tissue/organ by handling, testing, examining, and complying with FDA regulations for biological samples; spectroscopy theory; and modifications of software to control operation of real time data acquisition). *Must have proof of legal authority to work permanently in the United States.* Monday to Friday; 8:00 a.m. to 5:00 p.m. (some independent work required nights/weekends); \$29,830 per year. Send résumé in duplicate (NO CALLS) to: **R. Lechler, JO #1201006, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

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- (2) **ORGANIC CHEMIST:** M.S./B.S.-level organic chemists with sound fundamental knowledge of organic synthetic techniques and a willingness to work on a variety of structures and functional group transformations.

Interested applicants should send a complete résumé to:

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Attn: Christine Bolick—Human Resources Manager

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**Requirements for Submission:** Abstracts will not be considered unless the presenter is a paid registrant of Science Innovation '93. (Fax the coupon below for registration forms. Registration fee will be refunded in full if abstract is rejected and presenter cancels registration by July 23, 1993.) Only one abstract per presenter may be submitted.

**Format of Abstracts:** Abstracts not following the format required will be returned. The text of the abstract must fit within a 5" square area in the center of an 8.5" x 11" sheet of white paper. Since the text will be electronically scanned, use a letter-quality (not dot matrix) printer. Use black ink for all hand lettering. Do not double space text, nor draw a box around the abstract. At least two lines above the text, designate the name of the concurrent session to which the

abstract relates and indicate whether you wish your abstract to be considered for oral presentation. At least two lines below the text, list the presenter's name, address, phone, and fax numbers.

**Acceptance:** Applicants will be notified by July 1993 regarding the status of their abstracts. If your abstract is accepted, you will be assigned to a poster session and provided with a 4' x 4' bulletin board on which to display graphics and text. Posters will be displayed in the Exhibit Hall during the entire meeting, and presenters will be assigned two hours at their posters. Accepted abstracts will be published in the program book, which will be distributed to all registrants. Abstracts received after June 15, 1993 will not be published in the program book but may be accepted for display.

**Mailing Instructions:** Faxes are unacceptable. Mail the abstract flat (do not fold or bend). Send original plus four photocopies to: Science Innovation '93 Contributed Papers, AAAS Meetings, 1333 H St, NW, Washington, DC 20005.

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### CONCURRENT DISCUSSIONS ORAL OR POSTER PRESENTATION

- DNA Amplification
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- Non-invasive Diagnostics
- Imaging
- DNA Diagnostics
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- Drug Design
- Drug Targeting and Liposomes
- Clinical Immunology, Immunosuppression and Vaccines
- Cytokines and Cell Growth Factors
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- Thinking Machines and Neural Networks

### CONCURRENT PLENARIES

- Genomic Libraries
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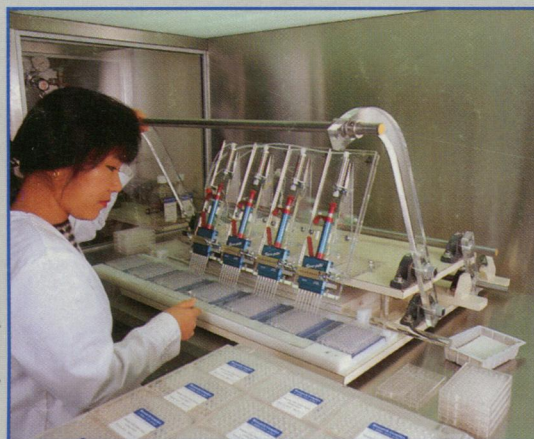


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