

## Random Primers DNA Labeling System

A new nucleic acid labeling kit does not require the use of DNase 1 to create a nick for DNA polymerase to translate. PRIME-1, random primers DNA labeling system, contains a mixture of all possible hexanucleotides; DNA polymerase I; solutions of unlabeled dATP, dCTP, dGTP, and TTP; control DNA; and stop solution to make either radioactive or nonradioactive labeling of DNA simple and convenient. Sigma Chemical Co. **Circle 87.**

## Desktop Video Production Software

Entry-Level Composer is desktop video production software for engineers, scientists, and others new to the concept of recording presentations on video. The software brings video production tools and techniques to UNIX workstations, including the ability to combine computer graphics with live video. Pull-down menus, slider bars, and click-on buttons help users combine different elements into one scene, add titles and other graphic elements to a scene, fade images in and out, and dissolve from one scene to another. Wavefront Technologies. **Circle 88.**

## Gel and Film Readers

Three turnkey Bio Image gel and film reader systems can be used with the new Bio Image 6cx Scanner. The systems, called the Bio Image 50S Series, provide a general-use platform for running sophisticated analysis software. Model 50S-WB is for the analysis of protein or DNA band patterns, model 50S-DNA is for the analysis of DNA sequencing films, and model 50S-2D is for the analysis of two-dimensional protein maps. The Bio Image 6cx Scanner is a white-light flatbed scanner with transmissive and reflective light sources, high spatial resolution (600 dpi or 42  $\mu\text{m}$ ),

and 8-bit digitization (256 gray level). The Sun computer is a 25-MHz system with 15.8 MIPS performance, 12 MB of random access memory, a 207-MB integral hard disk, and a 150-MB archiving tape drive. Each system comes with a software package for analyzing one type of sample and can be used to analyze other samples by adding appropriate software. Millipore. **Circle 89.**

## Nonglass pH Electrode

In this new nonglass pH electrode, a polyvinyl chloride membrane is recessed inside a polymer body, affording protection to the measuring surface. The membrane is specially suited for applications where fluoride ions are present. Other applications include food uses where nonglass sensors are preferable and wastewater containing hydrofluoric acid which attacks glass. Sensor-ex. **Circle 90.**

## Density Analyzer

The AccuPyc 1330 automatic density analyzer now comes with sample temperature readout to



$\pm 0.1^\circ\text{C}$ , a helpful feature for measuring materials whose density varies significantly with temperature. Instrument performance is traceable to National Institute on Standards and Technology standards. Data can be exported directly into spreadsheets for graphing and other calculations. Micromeritics. **Circle 91.**

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.

## Monoclonal Antibodies

A panel of 14 human monoclonal antibodies (MAbs) to human immunodeficiency virus (HIV) suitable for in vitro binding or neutralization studies is available for research. The MAbs are easily conjugated with fluorescent, enzyme, or EM labels and offer direct competition with antibodies from HIV-1-infected individuals. Viral Testing Systems. **Circle 92.**

New MAbs include four specific for mycoplasma, three specific for pancreatic tumor antigen, and one specific for heat shock antigen. Maine Biotechnology Services. **Circle 93.**

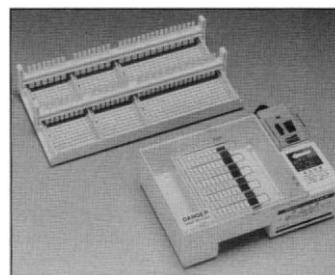
MRK 16 is a murine (IgG2a) MAb specific for a surface epitope of human P-glycoprotein. P-glycoprotein has been linked to multidrug resistance in cancer. Kamiya Biomedical Co. **Circle 94.**

## Cell Proliferation Assay

The CellTiter 96 AQueous Non-radioactive Cell Proliferation Assay, based on the use of a novel tetrazolium, is a colorimetric method for determining the number of viable cells in proliferation and chemosensitivity assays. The assay provides flexibility in that plates can be read and returned to the incubator for further color development. Promega. **Circle 95.**

## Electrophoresis System

Mupid-2 is a new gel electrophoresis system that can be used for both DNA-RNA (agarose) and protein (polyacrylamide) electrophoresis. The system comes complete with six mini-gel migration trays, combs, gel casting tray, and built-in power supply that has an output of 50 or 100 V. The gel marker sets can be used to prepare four small and two large gels simultaneously with



the help of two different size combs. Gels are prepared without any taping. Polarity of the migration can be changed by a simple flip of a switch. DNA Technologies. **Circle 96.**

## Literature

*Rezex: For Carbohydrate and Organic Acid Analysis* describes a line of high-performance liquid chromatography columns. Phenomenex. **Circle 97.**

*Product Catalogue 1993* details more than 700 reagents and assays for molecular and cell biology research. Topics covered include adhesion, flow cytometry reagents, in situ hybridization, custom services, designer genes, designer probes, cytokine antibodies, cytokine proteins, and cytokine enzyme-linked immunosorbent assays. British Biotechnology Products. **Circle 98.**

*S&S Rad-Free Kits for Non-Isotopic Detection of Western Blots* describes kits that feature two detection systems, one colorimetric and one chemiluminescent. The brochure describes the four conjugates available: goat anti-mouse, goat anti-rabbit, goat anti-human, and multi-specific protein A/G. Schleicher & Schuell. **Circle 99.**

*Revolutionise your research with CRB's molecular biology range* covers a range of products and services for oligonucleotide synthesis and applications, including the E-LINK system for the non-isotopic labeling of oligonucleotides. Cambridge Research Biochemicals. **Circle 100.**

# SCIENCE

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## POSITIONS OPEN

### MOLECULAR OR DEVELOPMENTAL NEUROBIOLOGIST

The University of Calgary Department of Anatomy and Neuroscience Research Group are seeking a full-time academic Molecular or Developmental Neurobiologist at the **ASSISTANT PROFESSOR** level or higher. This position offers an excellent opportunity to develop vigorous independent research programs and collaborative interactions within a multidisciplinary research environment. Duties will include teaching and graduate student supervision. Qualifications include a Ph.D., at least two years of postdoctoral experience, and research interests in molecular and/or cellular approaches to development or plasticity of the nervous system.

The selected candidate must compete successfully for salary and establishment funding from the Alberta Heritage Foundation for Medical Research, and will have 75% of time protected for research. Rank and salary commensurate with experience and qualifications.

*In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of Calgary has an Employment Equity Program and encourages applications from all qualified candidates, including women, aboriginal people, visible minorities, and people with disabilities.*

Please send curriculum vitae, a statement of research interests, and the names of three referees by February 28, 1993, to:

**Dr. Richard Hawkes**  
 Head, Department of Anatomy  
 The University of Calgary  
 3330 Hospital Drive N.W.  
 Calgary, Alberta, Canada T2N 4N1

### UNIVERSITY OF VIRGINIA DEPARTMENT OF PHARMACOLOGY

Applications are invited for two tenure-track positions at the **ASSISTANT PROFESSOR** level to begin in the fall of 1993. Exceptional candidates at a higher rank may be considered. The department is particularly seeking applicants with strengths in molecular aspects of neuropharmacology or signal transduction to nuclei; however, consideration will also be given to outstanding candidates in other areas compatible with existing strengths in cell regulation and signal transduction. Successful candidates are expected to develop externally funded research programs and to participate in graduate and medical student teaching. The University of Virginia provides a highly interactive scientific community well supported by core facilities, research centers and training programs. *Applications from women and underrepresented minorities are encouraged.* Preference will be given to applications completed by March 15, 1993.

Curriculum vitae, statement of research accomplishments and plans, and three letters of recommendation should be directed to either: **Dr. Patrice Guyenet** [neuropharmacology area] or **Dr. Julie Sando** [nuclear signalling area], Department of Pharmacology, Box 448 Health Sciences Center, University of Virginia, Charlottesville, VA 22908. *The University of Virginia is an Equal Opportunity/Affirmative Action Employer.*

### ASSISTANT PROFESSOR OF PHARMACOLOGY

The Department of Pharmacology of the Chicago College of Osteopathic Medicine (CCOM) invites applications for a tenure track faculty position at the level of Assistant Professor. A Ph.D. in Pharmacology and 1-2 years of postdoctoral experience are required. The successful candidate will be expected to participate in the teaching of pharmacology courses for osteopathic medical students, pharmacy students, and students in allied health sciences. In addition, the individual will be expected to develop an independent research program and to seek extramural support. Although the area of research is open, it should complement ongoing projects in the areas of biochemical pharmacology and toxicology. Located in an attractive suburban setting 25 miles west of the Chicago Loop, CCOM is a growing institution that offers a pleasant work environment and a competitive salary and benefits package. Candidates should submit their curriculum vitae along with the names, addresses, and phone numbers of three references, and a one page description of their teaching and research interests to:

**Venkatray G. Prabhu, Ph.D.**  
 Department of Pharmacology  
 Chicago College of Osteopathic Medicine  
 555 31st Street  
 Downers Grove, IL 60515  
*CCOM is an Equal Opportunity Employer.*

## POSITIONS OPEN

### ASSISTANT PROFESSOR OF MICROBIOLOGY

The Department of Microbiology, Georgetown University Medical School invites applications for a tenure track position at the rank of Assistant Professor to begin July 1993. We are seeking candidates with primary research interests directed towards the study of infectious disease. In particular, individuals with experience in applying molecular and/or immunological approaches to investigate the physiology of bacterial pathogens are encouraged to apply. The successful candidate will be expected to establish a vigorous research program in their area of expertise. Teaching responsibilities include establishment of a graduate level course in bacterial physiology, and participation in the medical microbiology course of the department. Send curriculum vitae, statement of research interests, and at least three letters of recommendation by March 15, 1993 to: **Chairman, Microbiology Search Committee, Department of Microbiology, Georgetown University, Washington, D.C. 20007.** *Equal Opportunity/Affirmative Action Employer.*

### Tenure-track ASSISTANT/ASSOCIATE PROFESSOR

positions available to study molecular and biochemical mechanisms of mammalian cell cycle control (cdc genes and cyclins) and tumor suppression. Successful candidates will be able to interact with a large number of other active independent investigators evaluating cellular, molecular, and clinical aspects of cancer. Please send curriculum vitae and names of three references to: **Hal E. Broxmeyer, Ph.D., Scientific Director, Walther Oncology Center, Indiana University School of Medicine, Room 501-975 West Walnut Street, Indianapolis, IN 46202-5121.** *Walther Oncology Center/Indiana University are Equal Opportunity Employers.*

### FACULTY POSITION MICROBIOLOGY AND IMMUNOLOGY

Applications for two tenure-track **ASSISTANT PROFESSORSHIPS** are invited from candidates with backgrounds in virology, immunology, prokaryotic biology, or cell biology utilizing molecular and/or cellular technologies. Our research programs focus on the pathogenesis of infectious diseases and/or gene expression of normal and neoplastic cells. Candidates should possess a Ph.D. or M.D. degree and exhibit a high potential to establish an independently funded research program. Send curriculum vitae, bibliography, statements of research and teaching interests, and arrange for 3 letters of reference to be sent to: **John M. Lehman, Ph.D., Department of Microbiology, Immunology and Molecular Genetics A-68, Albany Medical College, 47 New Scotland Avenue, Albany, NY 12208.**

*The Albany Medical Center is an Equal Opportunity/Affirmative Action Employer.*

### MOLECULAR BIOLOGIST

**ASSISTANT PROFESSOR**, tenure-track, teaching position at small, private, undergraduate, liberal arts institution, beginning fall 1993. Teach molecular biology, cell biology, and molecular aspects of genetics and development. Establish research program for undergraduates in molecular biology. Ph.D. required. Send curriculum vitae, names and addresses of three references, and a statement of philosophy for undergraduate science education by March 8, 1993 to: **Dr. J. Malcolm, Chair, Department of Biology, University of Redlands, Redlands, CA 92373-0999.**

*The University of Redlands is an Equal Opportunity Employer and encourages applications from women and minorities.*

Two **RESEARCH ASSISTANT PROFESSORSHIPS** in Neurotoxicology. One should focus on mechanisms underlying developmental consequences of xenobiotic exposure in the nervous system; requires experience in neuroscience and cell or molecular biology. The second will research cellular mechanisms of neurotoxicology, with emphasis on histochemistry, immunocytochemistry and xenobiotic metabolism. Inquiries and curriculum vitae to: **Dr. H. E. Lowndes, Rutgers University, Neurotoxicology Laboratories, 41 Gordon Road, Piscataway, NJ 08854; Telephone: (908) 932-6907; FAX: (908) 932-6905.** *An Affirmative Action/Equal Opportunity Employer.*

**GORDON RESEARCH  
CONFERENCES  
DIRECTOR**

**(CHIEF EXECUTIVE OFFICER)**

The Board of Trustees of The Gordon Research Conferences invites applications, nominations, and suggestions for the position of Director, the chief executive officer. Gordon Research Conferences, Inc. is a not-for-profit organization currently sponsoring around 150 high level research conferences annually in the areas of the chemical, physical, and biological sciences. The Gordon Research Center is located in Kingston, Rhode Island, on the Campus of the University of Rhode Island. Gordon Research Conferences are held in New Hampshire, California, and most recently in Europe and in the Pacific Basin. The Director maintains very close contacts with these sites through regular travel.

Qualified candidates should hold a degree at the doctoral level, should have a strong background and interest in scientific research, should be experienced in management, negotiation and budgeting, should possess strong interpersonal and communication skills, and should be willing to travel. Salary and benefits are competitive and will be commensurate with experience and responsibilities.

To apply, please forward a curriculum vitae, and a list of references to :

**The Search Committee  
Gordon Research Center  
University of Rhode Island  
Kingston, RI 02881-0801  
FAX: 401-783-7644**

A position description can be obtained by writing to the above address. Review of applications will begin around February 1st, 1993, and will continue until the position is filled. Gordon Research Conferences, Inc. is an equal opportunity, affirmative-action employer.

**THE CLARENCE E. DENOON, JR.  
PROFESSORSHIP OF SCIENCE**

**FOR A SENIOR BIOLOGIST WHO IS  
AN EXCELLENT TEACHER  
UNIVERSITY OF RICHMOND**

The University of Richmond announces the establishment of the Clarence E. Denoon, Jr. Professorship of Science. The occupant of this newly endowed chair is to be first and foremost a great and inspiring teacher. Research consonant and integrated with teaching excellence is expected. The area of specialization within biology is open, though someone who could teach and direct research in the cell and molecular area would be a particularly good fit.

Nominations as well as applications from worthy senior-level biologists (associate and full professors) are invited. Applicants should send a statement of interest, curriculum vitae, evidence of exceptional teaching ability and interest, selected writings, and the names and addresses of at least three references to

**David E. Leary  
Dean of Arts and Sciences  
University of Richmond  
Richmond, VA 23173**

Review of applications will begin in mid-February and will continue until the position is filled. The University hopes the appointee can begin to teach at Richmond in late August 1993.

*UR is an equal opportunity and affirmative action employer, and it encourages women and minorities to apply for its positions.*

**Mitotix** is a well-funded new biopharmaceutical company developing cell-cycle based therapeutics for cancer and other proliferative diseases.

We are looking for creative, highly motivated and enthusiastic scientists interested in developing successful strategies for proliferation control.

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Protein biochemists,  
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Individuals at senior/junior scientists level will be considered. We offer competitive salaries, equity participation and benefits, a wonderful location in the heart of Cambridge's scientific community, and the chance to work with leading science and business professionals. We are strongly committed to research and encourage participation in scientific meetings and publication of scientific results.

Send a curriculum vitae and the names and addresses of three references in confidence to: Human Resources Dept., **Mitotix, Inc.**, 1 Kendall Sq., Bldg. 600, Cambridge, MA 02139, USA. An Equal Opportunity Employer.



**Mitotix**

## POSITIONS OPEN

### FACULTY POSITION MOLECULAR BIOLOGY

The Department of Biochemistry of the Faculté de médecine at the Université de Montréal invites applications for a tenure-track position, preferably at the **ASSISTANT PROFESSOR** level. Candidates are expected to develop a vigorous research program in the area of gene regulation. Preference will be given to candidates using a genetically well characterized system. The Department has excellent research facilities and strong ongoing programs in cell and molecular biology. Applicants should hold a Ph.D. degree (or equivalent) and demonstrate capacity for independent research. The candidate should be prepared to teach in French one year after arrival. The position is available beginning September 1, 1993. Please send curriculum vitae, a statement of research interest, representative reprints and three letters of reference by March 15, 1993 to: **Dr. Normand Brisson, Search Committee Chairman, Department of Biochemistry, Université de Montréal, P.O. Box 6128, Station A, Montréal (Québec), H3C 3J7, CANADA.** In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. Université de Montréal is committed to equity in employment.

### DEVELOPMENTAL BIOLOGIST

**ST. CLOUD STATE UNIVERSITY**, tenure-track **ASSISTANT PROFESSORSHIP** for fall 1993. Ph.D. required; postdoctoral research and teaching desirable. Duties include teaching undergraduate courses in embryology, histology and cell biology. Student advising and other university-related services expected. University is committed to excellence in teaching and research involving undergraduate and master's students. Opportunities exist to develop other specialty courses. *Women, minorities and people with disabilities are encouraged to apply.* Offer of the position is dependent upon available funding. Forward application, curriculum vitae and three references by March 15, 1993 to: **Chair, Developmental Biology Search Committee, Department of Biological Sciences, MS 262, St. Cloud State University, St. Cloud, MN 56301-4498.**

### FACULTY POSITION IN VISION RESEARCH

The Basic Science Division of the Department of Ophthalmology and the Jules Stein Eye Institute at the University of California, Los Angeles, invites applications for a faculty position at the level of **ASSISTANT PROFESSOR**. The applicant should be prepared to establish a strong research program in molecular biology-based immunology, microbiology or pharmacology and should have the potential or demonstrated ability to generate extramural support for research. Qualified individuals should submit curriculum vitae and a letter describing research interests and research funding to: **Dean Bok, Ph.D., Jules Stein Eye Institute, 100 Stein Plaza, UCLA School of Medicine, Los Angeles, CA 90024.** UCLA is an Equal Employment Opportunity/Affirmative Action Employer.

### RESEARCH ASSISTANT PROFESSOR MOLECULAR BIOLOGY

Well-trained molecular biologist with at least two years of postdoctoral experience to join active research laboratory investigating cytokine regulation gene expression in cells of the immune system. Knowledge of gene cloning, sequencing, vector construction, site-directed mutagenesis, S1 nucleus mapping, nuclear binding (footprinting, etc.) and other molecular techniques necessary. Send curriculum vitae, research experience and names of three references to: **Chairman, Department of Molecular Medicine, Roswell Park Cancer Institute, Elm & Carlton Streets, Buffalo, NY 14263.**

Ph.D.: **CELL AND MOLECULAR BIOLOGIST** for colon cancer research project; to work with multispecialty research team. University appointment. For further information write to: **Dr. D. G. Miller, 428 East 72nd Street, New York, NY 10021.**

## POSITIONS OPEN

**DEAN, SCHOOL OF PHARMACY**—The University of California, San Francisco invites nominations or applications for the position of Dean, School of Pharmacy. Requirements include a doctoral degree and administrative experience in a complex university or comparable setting. Other desirable qualifications are experience in pharmaceutical education and research, knowledge of the profession of pharmacy, and significant academic accomplishments, including teaching, research, public service and leadership, commensurate with appointment at a tenured professorial level. Send nominations or letters of application with complete curriculum vitae, bibliography, and names of three references to: **Search Committee for Dean, School of Pharmacy, c/o Dr. Jeanne Coombs, Chancellor's Office, University of California, San Francisco, San Francisco, CA 94143-0402.** To ensure full consideration, letters of application should be received by March 15, 1993. UCSF is an Affirmative Action/Equal Opportunity Employer.

### ASSOCIATE DEAN FOR RESEARCH/ ASSOCIATE DIRECTOR

#### Montana Agricultural Experiment Station (MAES)

**Administrative (50%/Research (50%) position** in the Dean/Director's Office and in appropriate College of Agriculture department. The associate dean/associate director has delegated administrative and budgetary authority from the dean/director for 7 MAES research centers and for all MAES research projects; works with faculty and department heads in identifying, developing and coordinating competitive and other grant activities; coordinates patent development and technology transfer activities with Office of Research Vice President.

**Required:** Earned doctorate in agriculture or related discipline; record of excellence in teaching, research and service sufficient to qualify for appointment as associate professor or professor; demonstrated excellence in research as evidenced by publications, award of federal competitive grants and implementation of a sustained research program; experience related to off-campus research centers and in personnel administration, resource allocation, policy formulation and public relations.

**Nominations and Applications:** Nominations are invited and should be received by February 15, 1993. Applicants may request complete vacancy announcement and application information from the address below. Applicants must send (1) letter of application addressing the qualifications for the position, (2) current résumé and (3) names, addresses and telephone numbers of five professional references to: **Dr. Thomas McCoy, Chair, c/o Darlene Wruck, Secretary, Associate Dean for Research Search Committee, 202 Linfield Hall, Montana State University, Bozeman, MT 59717-0286; Telephone: (406) 994-4601; FAX: (406) 994-6579.**

Screening of applications begins March 10, 1993 and continues until a suitable candidate is hired.

ADA/Equal Opportunity/Affirmative Action/Veterans Preference.

### MOLECULAR BIOLOGY OF CANCER

Tenure-track appointments at the **ASSISTANT** and **ASSOCIATE MEMBER** level are available at Memorial Sloan-Kettering Cancer Center in the cellular and molecular biology of human cancer. Among areas of interest are regulation of growth and differentiation, signal transduction, oncogene activity and suppressor genes/cell cycle regulation.

Candidates with M.D. and/or Ph.D. degrees should have a successful record of research achievements and the capacity to establish an independent research program. Attractive start-up packages are available to establish the successful candidates' laboratories. Collaborations with basic and clinically bridging laboratory investigators at the Cancer Center are encouraged.

Interested applicants should forward curriculum vitae, bibliography, the names of three references and a research statement to:

**John Mendelsohn, M.D.  
Memorial Sloan-Kettering Cancer Center  
1275 York Avenue  
New York, NY 10021**

Memorial Sloan-Kettering Cancer Center is an Equal Opportunity/Affirmative Action Employer.

**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

### SHRIMP PROGRAM MANAGER

Responsible for planning and implementing research plan, developing and monitoring program budget, reviewing all experimental designs for federally-funded marine shrimp program.

Minimum qualifications: Ph.D. in Zoology, Veterinary Science, Animal Science, Biology or related field. Minimum five years experience in program management in aquaculture research, with emphasis on animal breeding technologies. Strong computer background, statistical experimental design, written and verbal skills. Current knowledge of state-of-the-art technology in shrimp culture.

Send résumé, salary requirements, and three written references to: **The Oceanic Institute, Personnel Office, Makapuu Point, Waimanalo, HI 96795.** Equal Opportunity Employer.

Yale University School of Medicine is recruiting a **DIRECTOR** for the **YALE COMPREHENSIVE CANCER CENTER**. The position will be at the Professor level. The successful candidate must be a physician who has a national and international reputation of excellence in clinical research. In addition, previous leadership and administrative experience are mandatory. The resources include a new 36-bed oncology/hematology unit to be opened in July 1993, and 50,000 net square feet of research and administrative space. Interested candidates please send résumé to: **Edwin C. Cadman, M.D., Chair, Department of Internal Medicine, Yale School of Medicine, P.O. Box 3333, New Haven, CT 06510-8056** by March 5, 1993. Yale is an Affirmative Action/Equal Opportunity Employer. Applications from women and members of minority groups are encouraged.

**CANCER CYTOGENETICIST.** The City of Hope (COH) National Medical Center is seeking an ABMG-certified or board-eligible cytogeneticist for the position of **ASSOCIATE DIRECTOR**. The candidate must have a doctoral degree (M.D. or Ph.D.) and a strong interest in clinical work and applied research opportunities. Experience in molecular cytogenetic/genetic techniques is desirable. COH is a 220-bed institution dedicated to the diagnosis and treatment of hematologic malignancies and solid tumors. Limited teaching responsibilities. Inquiries, curriculum vitae and references (3) should be submitted to: **Dr. Marilyn Slovak, City of Hope National Medical Center, Cytogenetics, N.W. Building, Room 2255, 1500 East Duarte Road, Duarte, CA 91010.** Affirmative Action/Equal Opportunity Employer.

### TENURE-TRACK FACULTY POSITION CENTER FOR CANCER AND TRANSPLANTATION BIOLOGY

The Center for Cancer and Transplantation Biology of the Children's Research Institute, Children's National Medical Center is reopening the search to recruit an investigator, M.D. or Ph.D. Candidates should have a background in molecular biology or immunology and demonstrated potential for developing an independent research program in an area of cancer biology (e.g. tumor-host interactions, mechanisms of neoplasia, or gene expression/regulation) or immunology. His/her program will complement existing basic research programs in the center. Support is available to establish the independent laboratory program in newly developed research facilities. Position, including university appointment, will be commensurate with training and experience.



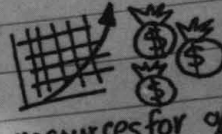
Interested candidates should submit curriculum vitae, statement of research interest, and two letters of reference to: **Stephan Ladisch, M.D., Director, Center for Cancer and Transplantation Biology, CRI/CNMC, 111 Michigan Avenue, N.W., Washington, DC 20010, (Telephone: 202/939-3898).**



### POSTDOCTORAL POSITION

Position available March 1 to study regulation of penicillin-binding proteins in *Bacillus subtilis*. Experience in microbiology and molecular biology required. Send curriculum vitae and names of three references to: **Dr. C. Buchanan, Department of Biological Sciences, Southern Methodist University, Dallas, TX 75275.** Equal Opportunity/Affirmative Action Employer.



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## Cancer Drug Discovery

**Molecular Pharmacology**—As a scientist in Cancer Drug Discovery, you will develop strategies to exploit cancer cell-selective molecular targets, and create approaches for drug discovery as additional targets are identified. Your background should include a PhD degree and at least 2 years of postdoctoral training, with research experience in the areas of pharmacology, oncology and molecular biology. Expertise in the application of the molecular biology of tumor cells (oncogenes, suppressor genes, differentiation genes, etc.) to cancer pharmacology is a strong advantage. (Response Code KG: M)

**Molecular Biology**—In collaboration with scientists in Cancer Drug Discovery, you will create approaches for exploiting important tumor cell targets as they are identified. Your background should include a PhD degree and 0-4 years of postdoctoral training, with research experience in the areas of molecular biology and oncology. Expertise in the cloning and expression of novel genes which regulate tumor cell growth (oncogenes, suppressor genes, differentiation genes, etc.) is highly desirable. (Response Code KG: F)

Pfizer offers a stimulating scientific research environment with opportunities to interact with scientists from many disciplines. In addition, we have a competitive compensation/benefit package that includes relocation assistance to this southeastern Connecticut shoreline community. Please send a resume indicating position of interest and response code, a description of your research experience and names of three references to: **Mr. Kym Goddu, Employee Resources Associate, Central Research Division, Pfizer Inc, Eastern Point Road, Groton, CT 06340.** We are an equal opportunity employer.



**Central Research**

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## POSITIONS OPEN

### FACULTY POSITIONS

Applications are invited for one or two openings for physical or biological scientists with background and interest in history and/or philosophy of science to teach primarily **Scientific Thinking**, a general requirement for science and arts students. The course emphasizes the common aspects shared by all sciences with the exposition of the scientific method. These faculty will also participate in an interdisciplinary sophomore seminar on "Great Books" for science and arts students. Additional teaching load in science will be assigned in areas of competence. Also one, possibly two, faculty openings for philosophers with special interests in philosophy of mind, ethics, and political philosophy to teach **Philosophical Thinking** in the core curriculum. Introduction to Logic, and Selected Topics in Philosophy. Language of instruction is English; course load three courses per semester. Ph.D. required for all posts. Two-year appointments (renewable) begin September 1993. Rank, salary according to qualifications and experience. For expatriates, housing, round trip air travel, plus schooling for two children included. Write, with curriculum vitae, to: **Provost Andrew Kerek, The American University in Cairo, 866 United Nations Plaza, Suite 517, New York, NY 10017** before March 1, 1993.

### UNIVERSITY OF GENEVA

The Faculty of Sciences of the University of Geneva seeks applications for the post of:

**Maitre d'Enseignement et de Recherche (= Lecturer)** in the field of environmental chemistry, more especially the study of nature and interactions of natural inorganic and organic particles and polymers in connection with their role in aquatic systems (natural waters, sediments and soils). The starting date for the appointment is 1 October 1993.

Candidates with a doctorate in chemistry and suitable research experience should send their applications to: **Professor J. Buffle, Département de Chimie minérale, analytique et appliquée, 30 quai Ernest Ansermet, CH 1211 Genève 4, Switzerland**, before 15 April 1993. Further information concerning the duties and conditions of employment may be obtained from: **Mme C. Grosse** at the above address, (Telephone: (41) 22 702 60 53).

The Department of Biological Sciences at Clark Atlanta University seeks **FACULTY MEMBERS** in Developmental Biology, Molecular Genetics, Environmental Toxicology, and Environmental Microbiology. All positions are tenure-track. The requirements are: the Ph.D. degree in the area, two years of postdoctoral experience, evidence of research productivity and the desire to establish an active research program. The salaries will be commensurate with experience. The start date for these positions is September 1, 1993. Please forward current curriculum vitae and three letters of reference to: **Dr. Juarine Stewart, Chair, Department of Biological Sciences, Clark Atlanta University, James P. Brawley Drive at Fair Street, SW, Atlanta, GA 30314** by February 1, 1993. *Equal Opportunity Employer.*

### POSTDOCTORAL ASSOCIATE NOVEL ANTIBIOTIC SYNTHESIS

Postdoctoral associate position open immediately for scientist to synthesize novel cephalosporin compounds. Opportunity to gain experience in enzymology and/or antimicrobial resistance. Requires Ph.D. degree in Chemistry, Medicinal Chemistry, or Pharmacology, and minimum of 2 years experience in synthetic organic chemistry. Experience in the synthesis of antibiotics or pharmacologically active compounds desirable. Send résumé, including names of 3 references, to: **Larry D. Sutton, MD, PhD, 106 MRC, Department of Pathology, The University of Iowa, Iowa City, IA 52242.** *The University of Iowa is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

**POSTDOCTORAL POSITION, NEUROBIOLOGY** available immediately. Research on micturition, defecation and reproduction: 1) Neuroanatomical pathways in periphery and CNS 2) Reflex studies 3) Electrophysiological and morphological properties of neurons 4) Locations and amounts of neurotransmitters 5) Pharmacology including role of excitatory amino acids 6) Effect of diabetes 7) Plasticity following injury. Contact: **I. Nadelhaft, VA Medical Center, University Drive C, Pittsburgh, PA 15240**, Telephone: 412-683-5056.

## POSITIONS OPEN

### POSTDOCTORAL POSITION MOLECULAR GENETICS UNIVERSITY OF MICHIGAN

Available immediately to study the molecular biology of the recently cloned Menkes disease gene. Applicants should have significant experience in molecular biology including cloning and sequencing. Send curriculum vitae and names of 3 references to: **Dr. Thomas W. Glover, Department of Human Genetics, 4708 Medical Sciences II, University of Michigan, Ann Arbor, MI 48109-0618**. FAX: (313) 763-3784.

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

### NMR SPECTROSCOPY OF CANCER

**POSTDOCTORAL POSITIONS** are available immediately for NMR SPECTROSCOPISTS experienced in studies of biochemistry or physiology in small animal or intact cell systems. A multi-disciplinary group is studying basic cancer biology and the effects of chemo- and radiotherapy using several unique high-field spectrometers. Send résumé to: **Dr. J.D. Glickson, The Johns Hopkins University School of Medicine, 110 MRI, 600 N. Wolfe St., Baltimore, MD 21287**. *Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITION IN RECEPTOR SIGNALING, UNIVERSITY OF CALIFORNIA, SAN FRANCISCO.** NIH-funded position to study the molecular basis of signal transduction by the G-protein-coupled receptor for parathyroid hormone. Molecular biological strategies will be used to alter specific signaling components to determine how this receptor couples to both adenylate cyclase and to phospholipase C. Send curriculum vitae and names of three references to: **Robert Nissenson, Ph.D., University of California, San Francisco, VA Medical Center (111N), 4150 Clement Street, San Francisco, CA 94121**. *Equal Opportunity/Affirmative Action Employer.*

### Novo Nordisk Biotech, Inc. A Research Subsidiary of the World's Leading Producer of Industrial Enzymes

**TWO POSTDOCTORAL POSITIONS** available for: 1) Secretion of selected enzymes from filamentous fungi, 2) Development of parasexual crosses in filamentous fungi. Molecular Biology and/or Molecular Genetics background necessary. Please state research interests, send curriculum vitae, and names of three references to: **Postdoctoral Committee, Novo Nordisk Biotech, Inc., 1445 Drew Avenue, Davis, CA 95616** or FAX to 916-758-0317. *An Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** available immediately to study the structure-function relationship of nucleotide activated ion channels involved in sensory transduction. The position will bridge a molecular biology lab and an electrophysiology lab. Experience in molecular biology, particularly site-directed mutagenesis and protein expression, is requested. Electrophysiological background is not necessary though a basic understanding of ion channel function is desirable. Please send curriculum vitae, a summary of research experience and names of three references to: **Dr. Jacqueline Tanaka, 601A Richards Building, Department of Biochemistry and Biophysics, University of Pennsylvania, Philadelphia, PA 19104-6089**.

**POSTDOCTORAL POSITIONS** available to study the relationship of gene expression and dynamics of anticancer drug action in patients. Experience in cell culture, pharmacodynamics, immunohistochemistry, and/or basic molecular biological techniques including PCR necessary. Send curriculum vitae and names of three references to: **Dr. Jessie L.-S. Au, Davis Professor, College of Pharmacy, The Ohio State University, 500 West 12th Avenue, Columbus, OH 43210**; FAX: 614-292-7766.

**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

**POSTDOCTORAL POSITION** available for the study of mechanisms of metabolism, DNA adduct formation, and carcinogenicity of polynuclear aromatic hydrocarbons and their derivatives. A Ph.D. degree is required; research training in chemistry, biochemistry and/or pharmacology is preferred. Applicants should submit curriculum vitae and names of three references to: **Dr. James W. Flesher, Department of Pharmacology, University of Kentucky, College of Medicine, Lexington, KY 40536**. *The University of Kentucky is an Affirmative Action/Equal Opportunity Employer.*

### POSTDOCTORAL POSITION CONSERVATION BIOLOGY OF PRIMATES

The New York Consortium in Evolutionary Primatology (NYCEP), consisting of 24 faculty from City University of New York, Columbia University, New York University, the American Museum of Natural History (AMNH), and NYZS/The Wildlife Conservation Society International (NYZS), invites applications to join a subset of primatologists concerned with conservation of primate species. The area of specialization within the field of primate conservation is open, although priority will be given to researchers who conduct applied research on social behavior, ecology, or population biology of endangered primate species. An interest in studying captive as well as wild primates is desirable. The successful applicant will be based at NYZS/The Wildlife Conservation Society, and will work primarily with either Dr. Mary Pearl or Dr. John Robinson for one year, starting 1 July 1993. Applicants should have field research experience and the Ph.D. in hand before the start date. Salary and benefits are competitive. *NSF regulations require that the job be filled by a U.S. citizen, national, or permanent resident.* Please send a preliminary application, including curriculum vitae, a one-page statement of research interests, and names, addresses and telephone numbers of three references so that they are received by 31 March 1993 at the office of: **Dr. Mary Pearl, NYZS/The Wildlife Conservation Society, Bronx, NY 10460**. *An Equal Opportunity/Affirmative Action Employer.*

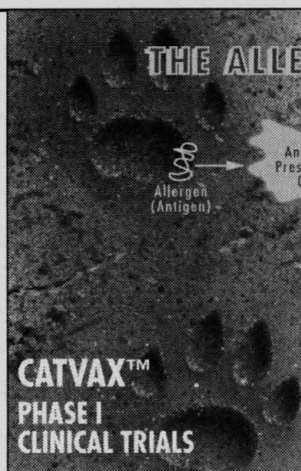
**TWO POSTDOCTORAL POSITIONS—MOLECULAR VIROLOGY** available immediately to study viral hepatitis and liver cancer. Experience in molecular biology not required. Background in fields such as organic chemistry, biochemistry, microbiology, toxicology or cell biology is preferred. Opportunity to learn advanced molecular biology techniques. Curriculum vitae and letters of reference should be sent to: **Ms. Teri Kingsley, Department of Pathology, University of Texas Medical Branch, Galveston, TX 77555-0605**. *UTMB is an Affirmative Action/Equal Opportunity Employer/M/F/H/V. UTMB hires only individuals authorized to work in the United States.*

**POSTDOCTORAL POSITION** to study the cell and molecular biology of microbial invasion. This project will focus on the strategies utilized by the intracellular protozoan parasite, *Leishmania* spp., to invade and replicate in host macrophages. Parasite adhesion to cloned leukocyte receptors and site-directed mutagenesis of these receptors will be examined. Molecular biology experience is preferred. Send curriculum vitae and the names of three references to: **David M. Mosser, Ph.D., Department of Microbiology and Immunology, TEMPLE UNIVERSITY SCHOOL OF MEDICINE, Philadelphia, PA 19140**. *Equal Opportunity/Affirmative Action Employer.*

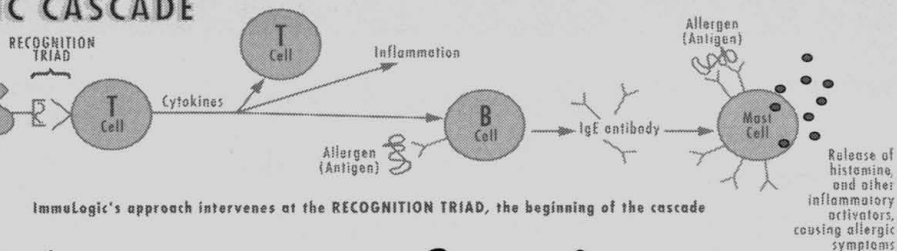
### POSTDOCTORAL POSITION

USDA, ARS, Bee Research Laboratory, in Beltsville, Maryland seeks a **POSTDOCTORAL RESEARCH ASSOCIATE** to conduct basic research on mechanisms of host-seeking behavior of parasitic honey-bee mites and to evaluate age, environmental, and genetic effects on honey-bee cuticular hydrocarbons and lipids using GC-MS. A Ph.D. in Entomology or related field dealing with host- or mate-seeking behavior required. This is a two-year position. Salary range: GS-11/12, \$33,623/40,298, commensurate with experience.

For information contact: **Dr. Calderone (301) 504-8574**. For applications contact: **Mr. Lynch, Personnel Division, USDA/ARS, (301) 344-0105**. Application should be postmarked by February 25, 1993 c/o: **Dr. Calderone, USDA/ARS, Bee Research Laboratory, Building 476 BARC-E, Beltsville, MD 20705**. *An Equal Opportunity Employer.*



## THE ALLERGIC CASCADE



ImmuLogic's approach intervenes at the RECOGNITION TRIAD, the beginning of the cascade

# A course of action to take you further

**CATVAX;** ImmuLogic's first allergy therapeutic under development to complete Phase I clinical trials. In addition, we are concentrating on ragweed, dust mites, grasses and Japanese cedar pollen. Our therapeutics will be based on relevant epitopes shown to redirect the immune system's response and avert an allergic reaction. Together, they will make up our complete family of ALLERVAX™ products, designed to treat the causes, rather than the symptoms of immune disorders.

Backed by strategic industry partnerships and breakthrough discoveries, we're making important strides in biopharmaceutical development. Challenge yourself to go the distance.

ImmuLogic has relocated to new, state-of-the-art facilities and has a scientific team that's taking our research and development in exciting new directions. We're in a position to offer you exceptional opportunities and support for your professional stature. We reward your contribution with a competitive compensation and benefits package. Please send your C.V., referencing the appropriate department, to: Human Resources Department, ImmuLogic Pharmaceutical Corporation, 610 Lincoln Street, Waltham, MA 02154. An equal opportunity employer.

### DISCOVERY RESEARCH

**Scientists** We have two immunology positions available in this newly developed group. You'll participate in the development, evaluation and performance of new research programs, and supervise Ph.D. and technical staff. Experience with inflammation and mucosal/epithelial immunity is preferred. Familiarity with current vaccine technologies, antigen identification and isotype regulation a plus. Requires a Ph.D. in Immunology/Microbiology/Biochemistry and 2-8 years postdoctoral experience in Immunology. One position also requires familiarity with molecular and protein techniques. **Dept. DRS.**

### IMMUNOLOGY

**Scientist** You'll perform T cell analysis and act as a project leader in our allergy programs. Requires a Ph.D. in Immunology or related field and 1-4 years postdoctoral experience. Human system T cell culture experience preferable. **Dept. IMS.**

### CLINICAL RESEARCH

**Sr. Research Associate** Responsibilities include performing T cell epitope mapping, data evaluation and presentation/organization of clinical contacts. You may be required to perform molecular biology techniques for lymphokine assays. Experience with human T cell culture is preferred. Requires a B.S. or M.S. with 5-10 years relevant industry experience. **Dept. CRA.**

### BIOCHEMISTRY

In these positions, you'll direct a group, working as a team member on a variety of allergy projects.

#### Sr. Scientist/Protein Chemistry

We are currently seeking a highly motivated scientist with a solid protein chemistry background to head a group of researchers involved in the identification, purification and characterization of allergens. You will need a strong background in protein purification, an excellent research record and good managerial skills. You'll be involved in the development and evaluation of therapeutic drugs for the treatment of allergies. Requires a Ph.D. in Biochemistry or a related field and a minimum of 10 years postdoctoral experience. Demonstrated supervisory abilities necessary. **Dept. SPC.**

#### Scientist/Molecular Biology

As a member of a large team working on the isolation of allergens, you'll be responsible for the construction and screening of cDNA plasmid, phage and eukaryotic expression and cDNA libraries. Requires a Ph.D. in Molecular Biology and 5-7 years postdoctoral experience. Knowledge of PCR and heterologous protein expression systems necessary. **Dept. SMB.**

#### Scientist/Protein Sequencing

You'll be responsible for characterizing recombinant and native proteins as to structure and sequence. A Ph.D. is preferred, with a minimum of 5 years experience in protein sequencing on Porton and ABI sequencers required. **Dept. SPS.**



**GRASS** allergy may be caused by 5 highly similar species of grass.



**JAPANESE CEDAR** affects approx. 8-10 million people in Japan.



**RAGWEED**, a major allergen, may cause debilitating symptoms during late summer and early fall.



**DUST MITES** are extremely difficult to remove from living environments, and may cause asthmatic symptoms.

# IMMULOGIC

Pharmaceutical Corporation



The clear relationship between business and science.

Our entrepreneurial  
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DNA-based human  
therapeutics, utilizing the  
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and molecular  
biology...  
through rapid  
product development  
and innovative commercialization strategies.

## Research Associate in Developmental Hematology

As a Research Associate, you will coordinate samples from clinical studies which will include the coordination of shipping of samples, maintenance of sample records and support of assays in the laboratory. ■ You must possess a science degree and typing/computer skills. Some laboratory experience is desirable. Your work week will be Tuesday through Saturday.

**(Job Code S-513)**

## Research Associate in Neurobiology

Your interest in working in the field of neural development and regeneration will make you an ideal candidate for this position. You must have at least two years of lab experience or equivalent, coupled with a BS degree and the ability to

interact well with co-workers. ■ Skills in animal surgery, animal models for neuronal degenerative diseases and general histology are desirable. Basic biochemical skills and some tissue culture experience are helpful. You should be meticulous, motivated and eager to learn new things. **(Job Code S-506)**

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. ■ If you're interested in these positions, please send your resume, in confidence, to: **Amgen Inc., Staffing, MS 10-1-A-411, Job Code (See Above), Amgen Center, Thousand Oaks, CA 91320-1789.** We are an Equal Opportunity Employer M/F/D/V.

# AMGEN

## THE ROCKEFELLER UNIVERSITY THEORETICAL & EXPERIMENTAL PHYSICS

A number of new appointments are intended to be made in physics as independent heads of laboratory at the non-tenured assistant and associate professor level as well as at the tenured full professor level. Space and initial institutional support for these operations will be available.

In addition to qualifications in physics, the University is especially interested in candidates who would constructively interact with the biomedical environment of the University.

Applicants should send their C.V. and a description of their research interests to:

**Physics Search Chair  
Rockefeller University  
Box 80, 1230 York Ave.  
New York, NY 10021**

The Rockefeller University is an equal opportunity employer and has an affirmative action program to increase the employment of women and members of protected groups at all job levels.



## NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES NATIONAL INSTITUTES OF HEALTH

### STAFF FELLOW/IMMUNOLOGIST

A research position is available in the Immunotoxicology Group, Systems Toxicity Branch, which studies the role of environmental influence on the immune system. The research involves the application of cellular and molecular immunology to the study of biologically active secretory products, such as proinflammatory cytokines and adhesion molecules, on skin and liver function and their role in toxic and carcinogenic processes. These studies require knowledge and expertise in cellular and molecular immunology. Interest in inflammatory mediators and regulation of gene expression is desired.

**General Requirements:** Applicants must have a Ph.D. or equivalent in Immunology, Cell Biology, Molecular Biology or closely related field, and show evidence of an ability to conduct independent research. Candidates with 2 to 3 years of post-doctoral experience is preferred but recent graduates will be considered.



For more information, contact:  
Michael L. Luster at  
(919) 541-4188

For prompt consideration, send  
cover letter indicating area of inter-  
ests, Curriculum vitae and three let-  
ters of reference to:

Ms. Norma Daye, (Code HNV63)  
NIEHS Personnel Office  
P.O. Box 12233  
Research Triangle Park, NC 27709

By April 30, 1993.

NIH is an Equal Opportunity Employer



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The Employment Exchange will take place at the **AAAS Annual Meeting**, 11-16 February 1993, at the Hynes Convention Center in Boston, Massachusetts.

Thousands of scientists in various disciplines have been invited to participate. Act fast and you can reach this unique pool of candidates.

For more information on how you can interview candidates on-site please refer to the 13 November 1992 issue of *Science*, or contact Jacquelyn Roberts at (202) 326-6737, Fax: (202) 842-1065.

## 1st Announcement Conference

**"Growth Factors and  
Tumor Promotion:  
Implications for Risk  
Assessment"**

**December 1 - 4, 1993**

Barton Creek Conference  
Resort  
Austin, Texas

For additional information  
as it becomes available,  
send name and address to  
P.O. Box 389, Smithville,  
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Telephone 512-237-2403  
Fax 512-237-2522

# Neuroscientists

At Genentech, Inc., our success as an entrepreneurial biotechnology company has made us one of the most stable in the industry. Our progressive environment and state-of-the-art facilities provide exceptional opportunities at all levels. Our scientists publish over 200 papers per year, and the citation rate for these manuscripts match the best universities and research institutions. We are currently seeking two Scientists to identify and assess new research opportunities in our Neuroscience Research Department.

You will be working on growth factors and their role in neurodegeneration and the function of neurons and glia. Successful candidate will have a PhD or MD with 3+ years' industrial or academic experience and training in neurobiology or cell biology. You should have outstanding scientific credentials and the drive, creativity and vision to contribute to and support an ongoing neuroscience program.

Genentech offers an exceptional benefits package which includes fully paid dental/medical/vision coverage for you and your dependents, child care facilities and free health club membership. For immediate consideration, please send your CV to: Dr. Franz Hefti, Genentech, Inc., Dept. NS/FH, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We promote and actively support affirmative action and equal employment opportunity.

## Genentech, Inc.

## Challenging Senior Research Associate and Post-Doctoral Career Opportunities For MOLECULAR/CELL BIOLOGISTS AND BIOCHEMISTS

We are a well-funded, independent biomedical research institute located on the North Shore University Hospital campus on Long Island, convenient to New York City and Cold Spring Harbor Labs. We're looking for capable, creative professionals to work alongside noted investigators and become involved with well-established and new research projects:

- **DIABETES & AGING** – Be part of a long-running research effort headed by Dr. Helen Vlassara, studying the vascular complications of diabetes and aging, e.g., atherosclerosis. Requires expertise in protein biochemistry plus cellular and molecular biochemistry.
- **ALZHEIMER'S DISEASE** – Working with Dr. Michael P. Vitek, you'll address the processing of Amyloid Precursor Protein, the role of Beta-Amyloid Peptide, and prevention of neurotoxicity in Alzheimer's Disease. Expertise in protein or biochemistry is desired.
- **GENE REGULATION – Post-Doctoral Positions Only** Headed by Dr. Richard Currie, this group will study the regulation of gene transcription during adipocyte and B lymphocyte differentiation. Expertise in protein biochemistry is desired.

We offer an excellent salary and benefits program, commensurate with experience. For confidential consideration, please forward your "c.v.", with salary requirement and indication of position of interest, to: **Human Resources Department-DAG, The Picower Institute, 350 Community Drive, Manhasset, New York 11030.** We are an equal opportunity/affirmative action employer.



## The Picower Institute for Medical Research

## POSITIONS OPEN

**POSTDOCTORAL POSITION IN THE *IN VITRO* EVOLUTION OF PROTEINS.** Position currently available for an individual interested in the *in vitro* evolution of proteins, including but not limited to antibodies. Research will include the development of novel recombinant techniques including phage display systems, and structural/functional characterization of evolved proteins. A doctoral degree and a strong background in molecular biology and protein chemistry are required. Send curriculum vitae and three references to: **Dr. Carlos F. Barbas, Department of Molecular Biology, MB-11, The Scripps Research Institute, 10666 North Torrey Pines Road, La Jolla, CA 92037.** *Affirmative Action/Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** available immediately for a Ph.D. in Biochemistry to study the role of phospholipases and GTP binding proteins in signal transduction in the iris smooth muscle. We are currently investigating the reconstitution of phospholipases (C and A<sub>2</sub>) with G proteins prepared from this tissue. Send curriculum vitae and the names of three references to: **Dr. Ata Abdel-Latif, Department of Biochemistry and Molecular Biology, Medical College of Georgia, Augusta, GA 30912-2100.**

*MCG is an Equal Opportunity/Affirmative Action Employer.*

### CANCER BIOLOGY TRAINING CORNELL UNIVERSITY

**PREDOCTORAL AND POSTDOCTORAL TRAINING** is available in the **CANCER BIOLOGY PROGRAM** at **CORNELL UNIVERSITY.** Training in the areas of regulatory genes controlling cell proliferation, differentiation and development, adhesion molecules in cancer metastasis, signal transduction, cell adhesion receptor integrins, calcium metabolism, and tumor virology is available in the laboratories of Drs. Anthony Bretscher, Bruce W. Calnek, James W. Casey, Richard A. Cerione, Jun-Lin Guan, Roy A. Levine, Willie H. Mark, Bendicht U. Pauli, David I. Shalloway, Bud C. Tennant, Volker M. Vogt, Robert H. Wasserman, and Andrew Yen. Please write to: **Cancer Biology Program, 215 Veterinary Research Tower, Cornell University, Ithaca, NY 14853-6401** with curriculum vitae, statement of experience and interests, and names of three references by March 1, 1993. Predoctoral applicants should submit transcripts and GRE results. *Training grant support is restricted to U.S. citizens or permanent residents.*

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

**POSTDOCTORAL POSITION IN MOLECULAR EVOLUTION AND GENETICS.** Research is focused on molecular mechanisms underlying the evolution of mammalian gene structure and expression. Projects emphasize hormone-inducible and tissue-specific patterns of gene transcription and mRNA translation. Additional studies involve multi-gene families, particularly selective forces underlying their evolution. Familiarity with basic molecular biological techniques is desirable. Interested persons should send updated curriculum vitae, along with names and addresses of three references to: **Dr. Franklin G. Berger, Department of Biological Sciences, University of South Carolina, Columbia, SC 29208.** FAX: 803-777-4002. *The University of South Carolina is an Equal Opportunity/Affirmative Action Employer.*

One **POSTDOCTORAL POSITION** available immediately with Dr. Hava Avraham and Dr. Jerome Groopman studying molecular aspects of human megakaryocytopoiesis, particularly signal transduction. A Ph.D. in molecular biology or cell biology is required. Please send curriculum vitae and three references to: **Hava Avraham, Ph.D., Hematology/Oncology Research, Harvard Medical School, New England Deaconess Hospital, 185 Pilgrim Road, Boston, MA 02215.** (Telephone: 617-732-9999 or FAX: 617-424-6237).

**POSTDOCTORAL POSITION:** Two- to three-year position, available July 1993, to study erythropoietin-induced signal transduction and erythropoiesis. The laboratory has a broad interest in molecular hematopoiesis and murine leukemia models. Molecular biology, biochemistry experience preferred. Send curriculum vitae, statement of research interests, and letters of recommendation to: **Dr. G. Longmore, Division of Hematology-Oncology, Washington University School of Medicine, 660 South Euclid Avenue, Box 8125, St. Louis, MO 63110.** *Washington University is an Equal Opportunity Employer.*

## POSITIONS OPEN

The Plant Molecular Genetics Institute of the College of Agriculture and Biological Sciences, University of Minnesota, invites applications for an **ASSISTANT** or an **ASSOCIATE PROFESSOR** in Plant Molecular Genetics. Nine-month, full-time, tenure-track position. The successful candidate will be located in one of six departments (Agronomy and Plant Genetics, Biochemistry, Genetics and Cell Biology, Horticultural Science, Plant Biology, or Plant Pathology), depending on expertise. The appointed individual will develop a program in plant developmental genetics or the molecular genetics of plant/pest interactions. Active participation in graduate education is expected. Teaching at the undergraduate or graduate level will be in the person's area of expertise. Minimum qualifications include a Ph.D. or equivalent in genetics, molecular biology, biochemistry, cell biology or other area with an emphasis on molecular biology/genetics and relevant postdoctoral (academic or industrial) training. Desired experience includes involvement in contemporary plant molecular biology/genetics research and participation in collaborative research. Salary is commensurate with qualifications and experience. The position will be available July 1, 1993, or as soon thereafter as possible. Applications should include curriculum vitae, one-page statement of interest, graduate school transcripts, and three letters of reference. Please send application materials to:

**Dr. Ronald L. Phillips**  
c/o Jeanne Davy  
Department of Agronomy and Plant Genetics  
411 Borlaug Hall  
University of Minnesota  
St. Paul, MN 55108

Telephone: 612/625-1213; FAX: 612/625-1268

All materials must be postmarked no later than March 31, 1993. *The University is an Equal Opportunity Educator and Employer.*

The University of Michigan Department of Neurology is seeking applicants for the position of **LECTURER IN NEUROLOGY** to conduct research on the role of GABA<sub>A</sub> receptor currents in status epilepticus and partial epilepsy. Candidates must be board eligible in Neurology and have a strong research background in electrophysiology of epilepsy. A clinical fellowship in epilepsy is desirable. Candidates should submit curriculum vitae, and a brief statement summarizing research interests to: **Dr. R. L. Macdonald, M.D., Ph.D., Department of Neurology, 1108 Neuroscience Building/1687, University of Michigan, Ann Arbor, MI 48104-1687.**

**POSTDOCTORAL POSITION** available to study receptor drug targets in the human parasitic nematode *Onchocerca volvulus*. NSF-RIMI-funded project focuses on nicotinic acetylcholine receptors utilizing the molecular biology of *C. elegans*. The goal is to produce transgenic *C. elegans* expressing functional parasite receptors. Candidates desired with a strong background in recombinant DNA techniques. Send curriculum vitae and names of three references to: **Dr. James Lewis, University of Texas at San Antonio, San Antonio, TX 78249.** *Minorities are especially encouraged to apply.*

**POSTDOCTORATE FELLOW**—Position open for Postdoctorate Fellow to study systemic and renal hemodynamics and changes in vasoactive humoral substances and their interaction with divalent ion nutrition. Ph.D. in physiology or pharmacology required. This position is for two years of support. Salary is negotiable. Closing date March 1, 1993. Submit curriculum vitae to: **Edward Zawada, M.D., Professor and Chairman, University of South Dakota School of Medicine, PO Box 5046, Sioux Falls, SD 57117-5046.** *Affirmative Action/Equal Opportunity Employer.*

### POSTDOCTORAL POSITION: MOLECULAR ENDOCRINOLOGY

**Dana-Farber Cancer Institute, Harvard Medical School**

We are seeking to fill an opening for a Postdoctoral Research Associate in the Division of Cancer Pharmacology to study the hormonal regulation of liver P450 gene expression. Strong basic research experience in molecular biology, biochemistry and/or cell biology highly desirable. Joint appointment in the Department of Biological Chemistry and Molecular Pharmacology at Harvard Medical School. *Underrepresented minority candidates are encouraged to apply.* Send curriculum vitae with brief summary of research experience, copies of select publications and names of three references to: **Dr. David J. Waxman, JF-526, Dana-Farber Cancer Institute, Harvard Medical School, 44 Binney Street, Boston, MA 02115.** *An Equal Opportunity Employer.*

## POSITIONS OPEN

### POSTDOCTORAL POSITION HARVARD MEDICAL SCHOOL

Study molecular mechanisms important for HIV infectivity. Project involves studies on the mechanism of action of HIV proteins and viral protein processing, trafficking and assembly. Studies will utilize a broad range of methods in molecular/cell biology and biochemistry. Experience in molecular biology, cell biology, or protein biochemistry required. Start date: Spring 1993. Send curriculum vitae, brief description of research experience, and names of 3 references to: **Dr. Dana Gabuzda, Dana-Farber Cancer Institute, JF711, 44 Binney Street, Boston, MA 02115.** *An Equal Opportunity Employer.*

**POSTDOCTORAL/ASSOCIATE RESEARCH SCIENTIST POSITIONS IN HIV PATHOGENESIS—COLUMBIA UNIVERSITY.** Two positions are available for the investigation of molecular mechanisms that contribute to the pathogenesis of AIDS. Candidates will join a multidisciplinary group studying the consequences of HIV-1 gene expression on cellular function and cellular gene expression in lymphoid and neuronal cells. Experience in molecular biology or virology required. Send curriculum vitae and references to: **Dr. Ofra Weinberger, Columbia University, Department of Physiology, 630 West 168th Street, New York, NY 10032.** *An Equal Opportunity/Affirmative Action Employer.*

**ASSOCIATE RESEARCH SCIENTIST/CELL BIOLOGIST.** Prepare and transplant cells; eye surgery on experimental animals; process histology specimens with microtome, cryostat, autoradiography; study tissue with light, electron microscopy, and histochemical methods; record/analyze experimental results. Organize data for publication. Ph.D. in Cell Biology or M.D. in Medicine plus 2 years in job or 2 years of ophthalmology involving eye surgery. Minimum of 3 publications in eye research. Send curriculum vitae to: **P. Gouras, M.D., Department of Ophthalmology, 630 West 168th Street, New York, NY 10032.** *Columbia University takes Affirmative Action to ensure Equal Opportunity.*

**POSTDOCTORAL POSITION** now available to study the structural biology and molecular genetics of the insulin receptor in patients with heritable insulin resistance. Research will focus on the identification of novel mutations in the insulin receptor gene, their expression in heterologous cell systems, and study of mutant receptors with respect to kinase activity, regulation of membrane transport, and mitogenesis. M.D. or Ph.D. in molecular genetics, cell biology, or related fields with experience in molecular biology and/or membrane transport are encouraged to apply. Send inquiries and requests for application to: **Dr. Nicola Longo or Dr. Louis J. Elsas, II, Division of Medical Genetics, Department of Pediatrics, Emory University, 2040 Ridgewood Drive, Atlanta, GA 30322.** Telephone: 404/727-5786, Fax: 404/727-5783.

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

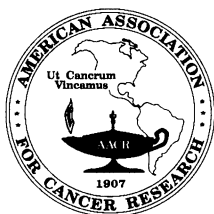
**ASSISTANT/ASSOCIATE/FULL PROFESSOR.** Applications are invited for a tenure-track faculty position in the **Department of Pharmacology** at **Baylor College of Medicine.** Applications are sought from individuals (M.D. and/or Ph.D.) with research interests in pharmacology. Preference will be given to candidates with a record of strong teaching skills and research support. Appointment will be made at a level appropriate for the successful candidate. Send curriculum vitae and names of three references to: **Dr. Lynn C. Yeoman, Search Committee Chair, Department of Pharmacology, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030.**

**POSTDOCTORAL FELLOW:** To study adipocyte gene expression. Project involves identification of novel gene products involved in the regulation of adipocyte differentiation and the potential role of these products in obesity/type II diabetes. Candidate should have working knowledge of basic molecular biology techniques but be especially competent in screening phage libraries and Northern Blottings. Send curriculum vitae and three reference letters to:

**Reed Graves**  
University of Chicago  
5841 South Maryland Avenue, MC 4080  
Chicago, IL 60637

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**AMERICAN ASSOCIATION FOR CANCER RESEARCH**  
**84th Annual Meeting**



**Michael B. Sporn, Program Chairperson**  
**Orange County Civic Center, Orlando, FL**  
**May 19-22, 1993**

***Major Sessions: Titles and Chairpersons***

**Predicting the Impact of Molecular Biology on Cancer Therapy in the 21st Century -**  
Joint AACR/ASCO Session - Stephen H. Friend

**Transgenic Mice as Models for Cancer Pathogenesis** Owen N. Witte

**From Bench to Clinic: Concepts in the Design and Targeting of New Chemotherapeutic Agents** Bruce A. Chabner

**Tumor Invasion, Angiogenesis, and Metastasis**  
Robert S. Kerbel

**Mechanisms of Action of Chemopreventive Agents: Basic Science and Clinical Applications** Martin Lipkin and Anita B. Roberts

**Molecular Mechanisms of Drug Resistance**  
June L. Biedler

**Advances in Molecular Epidemiology of Human Cancer** Curtis C. Harris

**Cytokines in the Immunomodulation of Cancer**  
Elizabeth A. Grimm

**The Biology and Therapeutic Application of Normal Hematopoietic Stem Cells** Malcolm A. S. Moore

**The Restoration of Normal Differentiation and Growth to Preneoplastic and Neoplastic Cells: Strategies for Differentiation Therapy**  
Waun Ki Hong

**Nitric Oxide and Superoxide: Endogenous Mediators of DNA Damage** Steven R. Tannenbaum

**Biology and Pathogenesis of Prostate Cancer**  
Maarten C. Bosland

**Vitamin D and Cancer** Michael B. Sporn

**Mesenchymal-Epithelial Interactions with Normal and Neoplastic Epithelial Cells**  
Gerald R. Cunha

**Proteases in Carcinogenesis and Tumor Progression** Lynn M. Matrisian

**Strategies for Utilization of Antisense Molecules or Ribozymes as Specific Anticancer Agents** Jack S. Cohen

**Biology and Genetics of Human Preneoplastic Lesions** Walter N. Hittelman

**Human DNA and Protein Adduct Dosimetry:**  
Regina M. Santella

**Biology and Treatment of Pediatric Cancer**  
Richard J. O'Reilly

**Latest Advances in Tumor Suppressor Genes**  
Edward E. Harlow

**Immunologic Approaches to Targeted Therapy**  
Ira Pastan

**Molecular Basis for the Modulation of Radiation Sensitivity** W. Gillies McKenna

**Gene Rearrangements in Human Cancer**  
Stanley J. Korsmeyer

**Protein Phosphatases in Carcinogenesis**  
Claude B. Klee

**Protein Kinase C: Modulator of the Cancer Phenotype and Target for Chemotherapy**  
Peter M. Blumberg

**The EGF and FGF Receptor Superfamilies: Recent Advances in Ligands, Receptors, and Signal Transduction** Andrew Baird and Michael Klagsbrun

**Workshop: Clinical Research Methodology**  
Brigid G. Leventhal and Steven Piantadosi

**Workshop: Embryonic Stem Cells and Gene Knockouts** Thomas C. Doetschman

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Further Information: AACR Office • Public Ledger Building • 620 Chestnut Street • Suite 816 • Philadelphia, PA 19106-3483  
**TELEPHONE** (215) 440-9300 • **FAX** (215) 440-9313

**NATIONAL CANCER INSTITUTE  
FREDERICK CANCER RESEARCH AND DEVELOPMENT CENTER  
ABL-Basic Research Program**

## POSTDOCTORAL FELLOWSHIPS

ABL-Basic Research Program Postdoctoral Fellowships are awarded for 1 to 3 years with annual stipends beginning at \$25,000. The senior staff members and their research interests are

**Stuart J. Austin, Ph.D.**

chromosome stability in bacteria; regulation of plasmid replication and distribution of copies to daughter cells

**R. Andrew Byrd, Ph.D.**

structure of proteins and carbohydrates studied by macromolecular NMR techniques

**Neal G. Copeland, Ph.D.**

development of mouse models of human disease; neurofibromatosis; gene targeting in ES cells

**Donald Court, Ph.D.**

regulation of gene expression by transcription initiation, transcription termination, and RNA processing

**Anthony Dipple, Ph.D.**

polycyclic aromatic hydrocarbon carcinogenesis and mutational specificity; chemical carcinogen-DNA interactions

**Peter J. Donovan, Ph.D.**

development of the mouse germ line; germ cell gene expression; sterile mutants; cell adhesion molecules

**Barbara K. Felber, Ph.D.**

molecular biology of human retroviruses; posttranscriptional mechanisms of gene regulation

**David J. Garfinkel, Ph.D.**

molecular biology of the retrotransposon Ty; genome rearrangement; insertional mutagenesis; gene regulation

**Stephen H. Hughes, Ph.D.**

structure and function of HIV reverse transcriptase; *ski* oncogene; expression of cytoskeletal genes; retroviral vectors; transgenic birds and mammals

**Nancy A. Jenkins, Ph.D.**

molecular genetics of mouse development; transgenic mice; receptor/ligand interactions and their role in development

**Peter F. Johnson, Ph.D.**

mammalian bZIP transcription factors; protein structure, dimeric interactions, mechanisms of transcriptional activation, and regulatory functions during cell differentiation and development

**David Kaplan, Ph.D.**

signal-transducing molecules in mitogenesis, oncogenesis, and development; identification and characterization of substrates of receptor and nonreceptor tyrosine kinases; function of *trk* genes

Send a curriculum vitae and the names of three references to the investigator(s) of interest, c/o Personnel Department/P-S, ABL-Basic Research Program, NCI-Frederick Cancer Research and Development Center, P.O. Box B (Rm. 43), Frederick, Maryland 21702. The ABL-Basic Research Program is an Equal Opportunity/Affirmative Action Employer.

**Amar J.S. Klar, Ph.D.**

mating-type switching of fission and budding yeast; genetics and molecular biology of recombination; gene regulation

**Christopher J. Michejda, Ph.D.**

antineoplastic and antiviral drug design; biochemical and molecular pharmacology

**Deborah Morrison, Ph.D.**

role of the proto-oncogene *c-ras* in mitogenic and developmental pathways; structure/function analysis of *c-ras*; identification of signal-transducing molecules

**Robert C. Moschel, Ph.D.**

chemical synthesis of carcinogen-modified DNA; physical chemistry of carcinogen-DNA interactions; DNA adduct-induced mutagenesis in bacteria and mammalian cells; chemotherapy adjuvants

**Stephen Oroszlan, Ph.D.**

immunochemistry and protein chemistry of retroviruses; structure and function of retroviral gene products; viral proteases

**Luis F. Parada, Ph.D.**

developmental neurobiology; the role of proto-oncogenes in development; gene targeting in ES cells; *trk* genes and neurotrophic receptors

**George N. Pavlakis, M.D., Ph.D.**

eukaryotic gene regulation; molecular biology of HIV and pathogenesis of AIDS

**Alan R. Rein, Ph.D.**

retroviral genetics; functional analysis of retroviral genes using natural and synthetic mutants; viral pathogenicity

**Nancy R. Rice, Ph.D.**

*rel* oncogene; molecular biology of equine infectious anemia virus

**Ronald Rubin, Ph.D.**

crystallographic investigations of oncogene products, protein-ligand interactions, and drug-nucleic acid interactions

**Jeffrey N. Strathern, Ph.D.**

recombination; pseudogene formation; DNA repair in yeast; cell type regulation; gene expression

**George F. Vande Woude, Ph.D.**

molecular basis of neoplastic transformation; role of proto-oncogenes in cell cycle regulation

**Alexander Wlodawer, Ph.D.**

structure of enzymes and cytokines studied by X-ray diffraction

## POSITIONS OPEN

Duke University, Department of Ophthalmology, is seeking to fill a full-time tenure-track ASSISTANT PROFESSOR position with a secondary appointment in Cell Biology or equivalent. Applicants should have a Ph.D. or equivalent and experience in cytoskeletal structure and function, and applications to studies of glaucoma (Trabecular meshwork), and be capable of independent funding. *Duke University is an Affirmative Action/Equal Employment Opportunity Employer.* Qualified applicants should send curriculum vitae to: David L. Epstein, M.D., Duke University Eye Center, Box 3802, Duke Medical Center, Durham, NC 27710.

CELL BIOLOGIST at the INSTRUCTOR or ASSISTANT PROFESSOR level. Candidates with post-doctoral experience and ability to perform independent research preferred. The Department of Otolaryngology supports a strong multidisciplinary basic research program investigating laryngeal function, vocal fold cell biology and laser-tissue interactions. Please send curriculum vitae and three letters of recommendation to:

Robert H. Ossoff, D.M.D., M.D.  
Chairman, Department of Otolaryngology  
Vanderbilt University, S-2100 MCN  
Nashville, TN 37232-2559

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**FACULTY POSITION  
IN VISION RESEARCH  
JULES STEIN EYE INSTITUTE  
University of California Los Angeles**

The Retina Division of the Department of Ophthalmology at UCLA and the Jules Stein Eye Institute and Doris Stein Eye Research Center invite applications for the position of ASSISTANT or ASSOCIATE PROFESSOR of Ophthalmology to establish a research program in Retinal Transplantation. Candidates should possess a Ph.D. in Cell Biology, strong background in vision research, ability and interest in teaching, and desire to collaborate with both basic scientists and clinicians. Preference will be given to candidates with expertise in Retinal Transplantation who have demonstrated research potential and a record of extramural funding. Qualified individuals should submit curriculum vitae, three references, and a letter describing research interests and accomplishments to: Hilel Lewis, M.D. or Dean Bok, Ph.D., Jules Stein Eye Institute, 100 Stein Plaza, UCLA School of Medicine, Los Angeles, CA 90024. *UCLA is an Equal Employment Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL RESEARCH POSITION  
MEMBRANE SYNTHESIS  
DURING THE CELL CYCLE**

A position is available to study the mechanisms of membrane biogenesis in a macrophage cell line. The ongoing research is focused on the biochemical signals that stimulate the genetic expression phosphocholine cytidyltransferase, the enzyme which regulates membrane phosphatidylcholine synthesis, and cell cycle control of the posttranslational modification of cytidyltransferase activity. Techniques routinely used include tissue culture, northern, southern and western blots, DNA sequencing, library screening, protein expression using baculovirus vectors, PCR-mediated mutagenesis, metabolic labeling, enzymology, and immunoprecipitation. Interested candidates with a recent Ph.D. degree should send curriculum vitae to: Dr. Suzanne Jackowski, Biochemistry Department, 332 North Lauderdale, Memphis, TN 38101. *An Equal Opportunity/Affirmative Action Employer.*

TWO POSTDOCTORAL POSITIONS are available immediately for recent graduates with an interest in the molecular biology of clinical antitumor drug resistance. Projects involve study of regulation of genes involved in drug resistance, with an emphasis on topoisomerases and P-glycoprotein, and development of novel cellular and molecular assays for drug resistance in patients' tumors. Experience in modern molecular biology and tumor cell disaggregation methods desirable. Please send or FAX: (901-521-1668) current curriculum vitae, cover letter, and names and telephone numbers of three references to: William T. Beck, Ph.D., Department of Pharmacology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38101. *An Equal Opportunity/Affirmative Action Employer.*



## POSITIONS OPEN

**POSTDOCTORAL POSITIONS** in neurobiology (with funding) available immediately for study of visual system development and regeneration using *in vivo* and *in vitro* paradigms. Background in tissue culture, anatomical, immunohistochemical techniques preferred. Contact: Drs. Gerald E. Schneider or Sonal Jhaveri, Department of Brain & Cognitive Sciences, E25-634, Massachusetts Institute of Technology, Cambridge, MA 02139, Telephone: (617) 253-5717. Equal Opportunity/Affirmative Action Employer.

### RESEARCH MICROBIOLOGISTS

Applications are invited for two positions in our Discovery Team in Microbiology Department: one for a Bacteriologist and one for a Mycologist. The candidates will have a B.S. or above degree with at least three years of industrial screening experience. Experience with classical mutagenesis is a plus. The suitable candidates should be genuinely interested in microorganisms and their physiology.

We offer a competitive compensation package. Please send curriculum vitae and references to: Novo Nordisk Entotech, Inc., 1497 Drew Avenue, Davis, CA 95616.

**IMMUNOLOGIST—PROFESSOR or ASSOCIATE PROFESSOR.** The Department of Microbiology and Immunology at Oregon Health Sciences University has been newly reorganized and staffed to emphasize the molecular basis of microbial pathogenesis and immunity. An active and expanding department wishes to recruit an individual with an outstanding record in molecular immunology who can contribute in a highly interactive setting. Candidate must have record of past and current extramural grant support. Excellent facilities and equipment in a new building are available and space, start-up funds and salary are competitive. Interested persons should send curriculum vitae, statement describing current research program and support, and long range research goals along with names of three references to: Dr. M. B. Rittenberg, Department of Microbiology and Immunology, L220, Oregon Health Sciences University, Portland, OR 97201. An Equal Opportunity Employer.

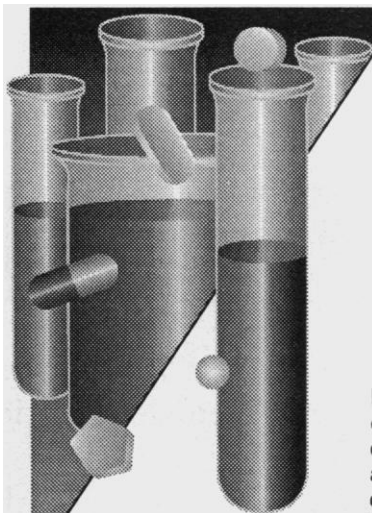
### ECOLOGIST

Grinnell College invites applications for a one-year sabbatical leave replacement as an **ASSISTANT PROFESSOR** (Associate Professor possible) of Biology to begin in August 1993. We seek an ecologist well acquainted with field research techniques to teach a sophomore-level course in population and evolutionary biology required for majors, an upper-level course in ecology, and a general education course in environmental studies for non-majors. We seek candidates with broad interests in biology who have completed the Ph.D. Support for student-faculty research and a 365-acre field station 11 miles from campus with a laboratory, pond, restored prairie, savanna and an oak forest are available. Send curriculum vitae, three letters of recommendation and all transcripts to: Charles H. Sullivan, Ecology Search Committee, Department of Biology, Grinnell College, Grinnell, IA 50112-0806; E-mail: Sullivac@Grin1.bitnet; FAX: (515) 269-4285. To assure full consideration, applications must be received by March 15, 1993. Grinnell College is an Affirmative Action/Equal Opportunity Employer and especially seeks women and minority candidates.

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## A DYNAMIC MISSION

*At the Glaxo Inc.  
Research Institute,  
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Founded in 1977 by Glaxo Holdings p.l.c. of London, England, Glaxo Inc. has grown quickly to earn a position of leadership among the top-ranking U.S. producers of prescription medicines. But our \$3+ billion in annual sales is just one measure of success. We prefer to define our

leadership in terms of our professional team — a team united to entrepreneurial energy and an ever-evolving dedication to betterment.

The continued expansion of our **BIOCHEMISTRY DEPARTMENT**, located at the Glaxo Inc. Research Institute in Research Triangle Park, NC, has created several exciting opportunities for the following individuals.

## SENIOR AND ASSOCIATE SCIENTISTS

Selected candidates will join our team of professionals within the **DIVISION OF MOLECULAR SCIENCES**, whose goal is to integrate biology, mechanistic and structural biochemistry to streamline the drug development process with a multi-disciplinary team approach. Current areas of research include immunology and inflammation, oncology and metabolic diseases.

One of these scientists will be involved with identifying novel therapeutic targets within the area of inflammation and requires training in protein/enzyme chemistry, and mammalian cell culture. Specific experience with macrophage and/or other cells of the immune system is desired.

We also seek scientists with experience in one or more of the following areas: enzymology (especially as it relates to signal transduction and/or cytokines), receptor biochemistry, biophysical chemistry, and cellular biology. Experience in molecular biology (cloning and expression), analytical biochemistry and laboratory automation is a plus.

**SENIOR LEVEL POSITIONS** require a Ph.D. in an appropriate discipline with a minimum of 2 years postdoctoral experience. **ASSOCIATE LEVEL POSITIONS** require a Master's Degree or research experience in an appropriate area. Experience within the pharmaceutical industry is highly desired.

Glaxo offers an attractive compensation and benefits package that features a matching savings plan, an on-site fitness center and much more. 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: **Job # 9127B113-SC, 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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## April 16 Special Issue

Don't miss this opportunity to advertise in this special issue that explores critical issues affecting female scientists and the companies and universities where they work.

Some of the questions examined in this special editorial section include:

- ◆ Is there a unique female approach to scientific problems? Which disciplines are female and male scientists predominant in? Is there a pattern?
- ◆ Does the private sector provide a better environment for female scientists? What programs have companies developed that make a difference? What hasn't worked?
- ◆ Female and male models of professional success in science: what's the difference?
- ◆ Are the issues facing female scientists in the U.S. global, or are the scientific barriers and frustrations different in Europe and Japan?

### BONUS DISTRIBUTION

In addition to reaching over 154,000 paid *SCIENCE* subscribers, the "Women in Science" issue will be distributed to these important societies:

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and  
Association for Graduate Women in Science**

Join the over 150 recruitment advertisers from last year's successful "Women in Science" issue in expressing your institution's commitment to equal opportunity and the advancement of women. Make your space reservation NOW!

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# WOMEN IN SCIENCE

## GRADUATE FELLOWSHIPS

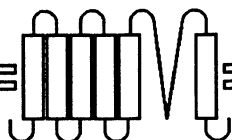
CENTER FOR THE STUDY OF EVOLUTION  
AND THE ORIGIN OF LIFE

### UCLA

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FORMATION OF THE EARTH . . .  
BEGINNINGS OF LIFE . . .  
EVOLUTION OF THE BIOSPHERE . . .  
ADVENT OF *HOMO SAPIENS* . . .

CSEOL invites applications for six graduate fellowships for 1993–94. In addition to support provided Fellows by UCLA departments, CSEOL will grant each Fellow a stipend of \$5,000 per year, for each of the first two years of graduate study, with no teaching or other duties. Stipends may be used for any purpose the Fellow deems appropriate—travel, lodging, attendance at scientific meetings, purchase of books, computers, research equipment—for any purpose, without restriction. Fellows are included in a select group of graduate students invited to interact with Center faculty in a weekly dinner/seminar/discussion series. Applicants should be planning to carry out doctoral research under the direction of a CSEOL faculty member in a subject area relating to **virtually any aspect of evolution—of the cosmos, of the solar system, of Earth, of the environment, of life, of humans.** Areas of particular interest for 1993–94 include (1) planetary evolution and exobiology; (2) origin and early evolution of life; (3) biochemical evolution and molecular phylogeny; and (4) interrelated environmental-biotic evolution. Faculty are members of the **UCLA Departments of Anthropology, Astronomy, Atmospheric Sciences, Biology, Chemistry & Biochemistry, Computer Science, Earth & Space Sciences, Geography, and Microbiology; the School of Medicine; the School of Public Health; the Institute of Geophysics and Planetary Physics; and the Molecular Biology Institute.** Fellowship applicants must apply (preferably, by 22 February 1993) both to an appropriate academic department and to CSEOL. For application forms and a list of CSEOL members, contact:

**CSEOL Fellows Committee**  
Geology Building, Room 5687  
University of California, Los Angeles  
Los Angeles, CA 90024-1567  
Telephone: (310) 825-1170  
FAX: (310) 825-0097



## ICAgen

**ICAgen**, Ion Channel Advances, is a newly formed company devoted to understanding ion channel structure and function and to discovering novel ion channel therapeutics. Presently, **ICAgen** is recruiting scientists and computer experts for beginning and advanced level positions.

**ICAgen's** approach is to bring a skilled team of scientists together to tackle the unlimited possibilities for the discovery of compounds which interact with ion channels. These scientists will work with academic collaborators to increase understanding of ion channel structure, function, activity relationships.

Qualified senior scientist applicants will have at least a Ph.D. and postdoctoral experience in the biophysics, biochemistry, cell or molecular biology of ion channels. Additionally, individuals with computer expertise which can be applied to ion channel structural analyses and dynamics, and to drug design are needed. Finally, associate scientists with bachelors degrees and at least 4 years of relevant laboratory experience will be hired. Individuals with prior pharmaceutical experience are encouraged to apply.

**ICAgen** offers the professional challenge of a young and innovative company in which you will make a difference! Its location within the Research Triangle Park provides access to a world-class scientific community within a beautiful part of the Carolina countryside. Send resumes including references to: Human Resources, **ICAgen Inc.**, 3500 Westgate Dr., Suite 900, Durham N.C. 27707. Equal Opportunity Employer.



NATIONAL UNIVERSITY OF SINGAPORE

### FACULTY OF SCIENCE

Applications are invited for one of the following appointments:

#### DEPARTMENT OF ZOOLOGY—TEACHING APPOINTMENTS

Candidates should possess a PhD degree and have teaching and research experience. Preference will be given to candidates who are able to teach in one or more of the following areas:

- Molecular Developmental Biology
- Molecular Neurobiology
- Marine Microbiology

#### BIOSCIENCE CENTRE—RESEARCH APPOINTMENTS

Candidates should have a PhD degree with at least two years of postdoctoral experience and a strong background in one or more of the following areas:

- Natural Products Chemistry/Biochemistry
- Toxin Chemistry/Structural Identification
- Protein Chemistry/Biochemistry
- Bioassays and Toxicology

Candidates should also have expertise in various techniques such as liquid chromatography, HPLC, mass spectrometry, NMR, Circular Dichroism, computer molecular modelling; protein characterization; recombinant DNA technology, bioassays; toxicology.

#### Emoluments

Gross annual emoluments range as follows:

Lecturer/Research Associate	S\$50,390–64,200
Senior Lecturer	S\$58,680–100,310
Associate Professor	S\$88,650–122,870

(US\$ 1.00 = S\$1.62 approximately)

The commencing salary will depend on the candidate's qualifications, experience and the level of appointment offered.

Leave and medical benefits will be provided. Depending on the type of contract offered, other benefits may include: provident fund benefits or an end-of-contract gratuity, a settling-in allowance of S\$1,000 or S\$2,000, subsidised housing, education allowance for up to three children subject to a maximum of \$16,425 per annum per child, passage assistance and baggage allowance for the transportation of personal effects to Singapore.

#### Facilities

All academic staff have access to the following computer and telecommunication resources: an individual microcomputer (an IBM AT-compatible or Apple Macintosh); an IBM mainframe computer with 16 MIPS of computing power; an NEC SX supercomputer with 650 MFLOPS of computing power; departmental laser printers; a wide spectrum of mainframe and microcomputer software; voice-mail. A campus-wide network, which is based on the high speed optical fibre based FDDI technology, links up all the academic staff and student microcomputers, UNIX workstations and provides access to the mainframe computer, the supercomputer, UNIX hosts, the on-line library catalogue, CD-ROM databases, Televue, Internet and BITNET.

Application forms and further information on terms and conditions of service may be obtained from:

**The Director**  
Personnel Department  
National University of Singapore  
10 Kent Ridge Crescent  
Singapore 0511

**The Director**  
North America Office  
National University of Singapore  
55 East 59th Street  
New York, N.Y. 10022, U.S.A.  
Tel: (212) 751-0331

Enquiries may also be sent through BITNET to: **PERPL @ NUS3090**, or through Telefax: (65) 7783948

# Postdoc

A position is available in the area of animal cell culture technology: The project is aimed at introducing new online sampling and analytical devices and integrating them into advanced process control systems.

The candidate should have a PhD or equivalent degree with a strong background in both animal cell culture technology and process engineering. Experience in cell biology, analytical techniques such as HPLC, GC/MS and FIA, and in process control systems is desirable.

To apply, please send your C.V. under ref. "Science" to Dr. U. Spaeti, Ciba-Geigy Ltd., Personnel Department, P.O. Box, CH-4002 Basle, Switzerland.



## Research Associate-Technologist

### Molecular Biology- Flow Cytometry

The Long Island College Hospital has a position available on our developing Cancer Center in Brooklyn Heights for an individual to study natural killer lymphocytes and human stem cells in cultures; isolate and purge them and design and conduct experiments in molecular biology aimed at cloning novel proteins and transfecting genes. Faculty appointment at SUNY possible.

Ph.D. or MS in Molecular Biology, Immunology or related field and 3-5 years' experience with flow cytometry, tissue cultures and recombinant DNA procedures desirable.

The Long Island College Hospital offers salary commensurate with experience, an excellent, flexible benefits package and a highly desirable, historic Brooklyn Heights location. Please send c.v. which must include salary requirements, brief statement of previous research training and 2 letters of recommendation to: **Employment Manager-RA, The Long Island College Hospital, Brooklyn, NY 11201.** An Equal Opportunity Employer M/F/H/V.



## POSITIONS OPEN

### FACULTY POSITIONS IN DRUG ABUSE AND ALCOHOLISM

The University of Arkansas for Medical Sciences (UAMS) is seeking two full-time faculty with interests in drug abuse and alcoholism. The first position is for a research-oriented physician to take primary responsibility for the development of a new clinic for intravenous drug abusers which will emphasize methadone maintenance. Candidates for this position should have experience in the treatment of substance abusers and a record of research productivity in related areas. A joint appointment in the Departments of Pharmacology and Psychiatry is anticipated with the primary appointment possible in either department. The second position is for a basic scientist at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level with a strong record of research productivity in cellular or molecular aspects of alcoholism, drug abuse, or neuropharmacology. This position is in the Department of Pharmacology. Adequate laboratory space will be available in a new research building scheduled for completion in the summer of 1993. Both positions are tenure-track. Interested applicants should send a letter of interest and curriculum vitae to: **Dr. D.E. McMillan, Department of Pharmacology and Toxicology, University of Arkansas for Medical Sciences, 4301 West Markham Street, Little Rock, AR 72205.** UAMS is an Equal Opportunity/Affirmative Action Employer.

### TENURE-TRACK POSITIONS IN ANATOMY/HISTOLOGY

The School of Biological Sciences invites applications for up to two tenure-track **ASSISTANT** or **ASSOCIATE PROFESSORS** in anatomy/neuroanatomy/histology. Applicant research areas should be compatible with school programs emphasizing molecular recognition, as applied to supramolecular assemblies and involving mechanisms of cellular regulation, proliferation, signal transduction, sensory perception, endocrinology, cell injury and cell transport. We seek individuals with demonstrated potential to establish independent, extramurally-funded research programs in any of the above or related research areas. Communication and organizational skills are required. Teaching responsibilities include health science (M.D., D.D.S.) courses in gross anatomy, neuroanatomy, embryology and histology, and undergraduate and graduate (Ph.D., M.S.) courses in the biological sciences. Competitive salaries, newly renovated research space, start-up funds, and excellent core facilities are available. Review of applications will begin March 15, 1993. Submit curriculum vitae, statement of research goals and teaching interests, and three letters of reference to: **CBB-1 Search Committee, UMKC—School of Biological Sciences, 5100 Rockhill Road, Kansas City, MO 64110-2499.** Equal Opportunity/Affirmative Action Employer.

### ANIMAL PHYSIOLOGY THE UNIVERSITY OF MICHIGAN

The Department of Biology at the University of Michigan invites applications for a tenure-track position in the field of Animal Physiology. We anticipate hiring at the **ASSISTANT PROFESSOR** level, but outstanding candidates at higher levels may be considered. The successful candidate will join a large, diverse department with strength in both organismal and molecular biology. The specific subfield of physiology is of less concern than is a record of excellence in research and a commitment to undergraduate and graduate teaching. In addition to establishing a strong research program, the successful candidate will be expected to participate in teaching an undergraduate course in comparative animal physiology and a graduate-level course in his or her area of expertise. Applications should include a current curriculum vitae, copies of up to three relevant reprints, a brief statement of future research plans, and three letters of reference. Application deadline is March 3, 1993. Application material should be sent to:

Chair, Animal Physiology Search Committee  
Department of Biology  
The University of Michigan  
Natural Science Building  
Ann Arbor, MI 48109-1048

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



## POSITIONS OPEN

### AVIAN OR MOLLUSCAN BIOLOGY THE UNIVERSITY OF MICHIGAN

The Museum of Zoology and the Department of Biology announce a joint, tenure-track position for an **ASSISTANT CURATOR/ASSISTANT PROFESSOR** of Biology; beginning as early as September 1, 1993. The appointee must have the Ph.D. and a demonstrated commitment to research in the comparative biology of mollusks or birds. Qualifications to participate effectively in the teaching program of the Department of Biology and to serve as a curator of a large ornithological or malacological collection are expected. Postdoctoral experience is desired. Applications are particularly sought from persons in such areas as molecular systematics, ecological genetics, behavior, functional morphology, physiology, or developmental biology within a systematic context. Three letters of recommendation and an application consisting of a statement of professional goals, curriculum vitae, and 3 copies of publications should reach the following address on or before March 3, 1993: Search Committee, Museum of Zoology, The University of Michigan, Ann Arbor, MI 48109-1079. *The University of Michigan is an Affirmative Action/Equal Opportunity Employer.*

### STREAM ECOLOGIST

St. Cloud State University (SCSU) tenure-track **ASSISTANT PROFESSOR** position available September 1993. Seeking a broadly trained field aquatic zoologist with a Ph.D. in Biological Sciences or related fields. Teaching duties include stream ecology, freshwater invertebrate zoology, and water quality. Water analysis skills are required. Experience in stream macroinvertebrate population ecology, analytical and computer skills, including GIS training are desirable. Send letter stating interests and goals in research and teaching. Address qualifications listed, curriculum vitae, and three letters of reference to: Stream Ecologist Committee, Department of Biological Science, St. Cloud State University, St. Cloud, MN 56301-4498. Application deadline is March 22, 1993. *Applications from women, minorities, and people with disabilities are encouraged.*

### MOLECULAR IMMUNOLOGIST Children's Hospital of Eastern Ontario Research Institute

The Division of Virology and the Department of Pediatrics, Children's Hospital of Eastern Ontario, and University of Ottawa, are accepting applications for a full-time molecular immunologist at the **CLINICAL LECTURER/ASSISTANT PROFESSOR** level to begin November 1, 1993. This position will be externally funded with a secondary appointment in the Department of Microbiology and Immunology. The salary is \$42,000 per year. The required qualifications include a Ph.D. in immunology and postdoctoral training on the interactions of Epstein-Barr virus pathogenesis, cytokines and tumor development. Experience in molecular biology and receptor-ligand interactions is required. Qualified applicants should send curriculum vitae with a letter of interest to: F. Diaz-Mitoma, M.D., Ph.D., Division of Virology, CHEO Research Institute, 415 Smyth Road, Ottawa, Ontario K1H 8M1, Canada. Applications should be received by March 1, 1993. *Preference will be given to Canadian citizens, permanent residents and minorities.*

### POSTDOCTORAL POSITION IN MOLECULAR BIOLOGY

A position is available immediately to participate in studies concentrating on the regulation and expression of genes for polypeptide growth factors and their receptors and their roles in carcinogenesis. The studies will involve use of transgenic animals and gene targeting, cDNA and genomic cloning and many routine techniques in molecular biology. A strong background and hands-on experience in molecular biology are essential. Send curriculum vitae and the names of three references to: Dr. Reza Zarnegar, Department of Pathology, Room S762 Scaife Hall, School of Medicine, University of Pittsburgh, Pittsburgh, PA 15261. Telephone (412) 648-8657; FAX (412) 648-1916.

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## PHARMACEUTICAL PRODUCTS DIVISION

### Sr. Research Scientist

For this position within the Immunosciences Research Area of our Drug Discovery Group, applicants should hold a PhD in Immunology or related field, with post-doctoral training in cell-mediated or humoral immunity. Research experience in the signal transduction of T or B lymphocyte activation is highly desirable. Candidates must be able to conduct creative, independent research; communicate effectively; and supervise staff associates. **Reply to Patricia Handy, Job# 53549.**

### Associate Scientists

Also within the Immunosciences Research Area of our Drug Discovery Group, this position requires a BS or MS in Immunology or related field. Research experience with cellular and biochemical assays of T and B lymphocyte activation is desirable. **Reply to Patricia Handy, Job# 53548.**

### Cell/Molecular Biologist

You will contribute to antiviral drug discovery through gene cloning, DNA sequencing, and recombinant protein expression in eukaryotic/prokaryotic systems. In addition, you will assist in protein purification and implementation of novel antiviral screens. We require a BS or MS in Molecular Biology and 2-5+ years using standard molecular biology techniques. Knowledge of PCR cloning, DNA sequencing and mutagenesis, and protein purification is expected, as is familiarity with bacterial physiology or eukaryotic expression systems. **Reply to Patricia Handy, Job# 50044.**

## DIAGNOSTICS DIVISION

### Cell Biologist

You will develop reagents and new technology for flow cytometry-based assays. We require an MS or PhD in Cell Biology or related field, and 3+ years of hands-on experience in the development of flow cytometry technology and reagents. Experience with dyes, stains, and fluorescent labelling of antibodies and nucleic acids is desired. You must also be capable of functioning as lead scientist and flow expert. **Reply to Ann Ribbens, Job# 54932.**

Abbott provides an excellent salary and benefits package including profit sharing and a stock retirement plan. We are located in an attractive suburban area, approximately 30 miles north of Chicago. For confidential consideration, please send a resume (indicating appropriate reply name and job #) and salary history to: **Corporate Staffing, Abbott Laboratories, One Abbott Park Rd., Abbott Park, IL 60064.** Abbott is an Affirmative Action Employer/Smoke-Free Environment.

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## POSITIONS OPEN

### GRADUATE DEAN SEARCH EXTENDED UNIVERSITY OF ALABAMA AT BIRMINGHAM (UAB)

The Graduate Dean at UAB will play a supportive role in planning, coordinating, and promoting graduate programs of quality and excellence. The Dean will work closely with the offices of the two academic vice presidents (Health Affairs and Academic Affairs), other academic deans, department heads, and faculty to foster quality graduate programs that will achieve recognition at the national and international levels.

The successful candidate should be nationally recognized as a scholar, serve as a role model for graduate students in developing their talents as scholars, possess a distinguished record of academic accomplishments, and qualify for a tenured appointment in an appropriate academic unit within the University.

Candidates should submit a letter of application and curriculum vitae. Screening of applicants will begin immediately and will continue until the position is filled. Applicants and nominations should be sent to:

Graduate Dean Search Committee  
University of Alabama at Birmingham  
UAB Station—102 MJH  
Birmingham, AL 35294-2010

**PROFESSOR AND HEAD—DEPARTMENT OF PLANT PATHOLOGY.** Kansas State University is seeking a person to serve as Head, Department of Plant Pathology, effective June 18, 1993. Applicants must have a Ph.D. in Plant Pathology or a closely related field and national recognition in research, teaching, or extension. Please submit a letter of application, including a statement of leadership philosophy; curriculum vitae; and arrange for three reference letters to be sent to: **William Bockus, Department of Plant Pathology, Throckmorton Hall, Kansas State University, Manhattan, KS 66506-5502, Telephone: 913-532-6176, FAX: 913-532-5692.** Applications are due April 2, 1993. *Kansas State University is an Affirmative Action/Equal Opportunity Employer.*

### DIRECTOR, Cardiothoracic Imaging Research Center

The University of Pennsylvania seeks an experienced cardiothoracic imaging researcher who can provide a bridge between clinicians and basic researchers involved in cardiothoracic imaging as a clinical or investigative tool. Will work with state-of-the-art imaging facilities, including MRI, high speed CT and PET and SPECT.

Must qualify for Faculty position in the University of Pennsylvania; level of the position determined by experience. *The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer. Minority and women candidates are encouraged to apply.* Contact: **Leon Axel, Ph.D., M.D., Department of Radiology, Hospital of the University of Pennsylvania, 3400 Spruce Street, Philadelphia, PA 19104.**

**POSTDOCTORAL POSITIONS:** Two positions are available to study the molecular biology and genetics of: 1) G-protein signaling using gene targeting and 2) the regulation of blood pressure using transgenic animals. Candidate must be US citizen or permanent resident. Supplementation of NIH stipend depending on experience. Send letter stating interest, curriculum vitae, and names of three references to: **Richard M. Mortensen, M.D., Ph.D., Endocrine-Hypertension Division, Brigham and Women's Hospital, Harvard Medical School, 221 Longwood Avenue, Boston, MA 02115.** *An Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** available immediately to study the interplay between cAMP and  $Ca^{2+}$ -mobilizing systems in mammalian cells (see J. Biol. Chem. 1991, 266, 4995 and PNAS, 1992, 89, 6716). Structure-function studies are envisaged for various  $Ca^{2+}$ -sensitive adenylyl cyclases. Experience with molecular biological methods is required and knowledge of signal transduction systems desired. Send curriculum vitae and names of references to: **Dr. D.M.F. Cooper, Department of Pharmacology, Box C-236, University of Colorado Health Sciences Center, Denver, CO 80262.** (FAX-303-270-7097).

## POSITIONS OPEN

### POSTDOCTORAL POSITION CARTILAGE BIOMECHANICS AND MICROSCOPY

Available September 1993. A background in bioengineering and a strong interest in connective tissue structure and function is desired. Projects involve studying the effect of tissue loading on cell behaviour, and the relationship between extracellular matrix ultrastructure and mechanical properties, in cartilage. Advanced microscopic techniques will be utilised. Please send curriculum vitae and names of three references to: **Ernst B. Hunziker, Director, ME Mueller Institute for Biomechanics, Postfach 30, 3010 Berne Switzerland.**

**TWO POSTDOCTORAL POSITIONS** available (three years) to join a highly motivated group studying the regulation of serine-, matrix metallo- and cysteine proteinases critical to the expression of tissue-invasive/destructive phenotypes in normal and neoplastic cell populations (Science 249:178, 1990; Science 254:99, 1991; J. Biol. Chem. 267:5005, 1992). Efforts will center on the creation and characterization of *in vitro* and *in vivo* models (transgenic and embryonic stem cell approaches) to define the role of the proteinase/antiproteinase balance in regulating extracellular matrix remodeling during inflammation and metastasis. Background in molecular biology with interest in the extracellular matrix, integrins, proteinases or endothelium preferred. Applicants must be U.S. citizens or have permanent residence status. Submit curriculum vitae and two letters of reference to: **Dr. Stephen J. Weiss, Upjohn Professor of Medicine & Oncology, University of Michigan Cancer Center, C570 MSRB II-1150 W. Medical Center Drive, Ann Arbor, MI 48109-0668.**

**POSTDOCTORAL POSITION** available immediately to study evolutionary relationships of marine algae using gene sequence comparisons. Molecular biology experience required, phycolgy experience preferred. This research is part of a three year NSF EPSCoR grant awarded to the State of Maine. Send curriculum vitae and names of three references to: **Dr. Robert A. Andersen, Bigelow Laboratory for Ocean Sciences, West Boothbay Harbor, ME 04575.** *Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** available immediately to study the interplay between cAMP and  $Ca^{2+}$ -mobilizing systems in mammalian cells (see J. Biol. Chem. 1991, 266, 4995 and PNAS, 1992, 89, 6716). Structure-function studies are envisaged for various  $Ca^{2+}$ -sensitive adenylyl cyclases. Experience with molecular biological methods is required and knowledge of signal transduction systems desired. Send curriculum vitae and names of references to: **Dr. D.M.F. Cooper, Department of Pharmacology, Box C-236, University of Colorado Health Sciences Center, Denver, CO 80262.** (FAX-303-270-7097).

**POSTDOCTORAL POSITIONS** are available to study either hepatocellular differentiation and reovirus replication or cellular and molecular aspects of mucosal immune response to reovirus. Please send curriculum vitae to: **Don H. Rubin, Associate Chief of Staff for Research (151), VA Medical Center, 1310 24th Avenue South, Nashville, TN 37212-2637/Equal Opportunity Employer.** FAX 615-321-6305, E-mail: rubindh@ctrvx.vanderbilt.edu.

### RESEARCH SCIENTIST

Position available immediately to study the structure-function relationship of IL-1 receptors type I and type II. Specific requirements include strong background in molecular biology, including cDNA cloning and sequencing, vector construction, point mutations and PCR. Send curriculum vitae, the names and addresses of three references, and salary requirements to: **David Benjamin, M.D., The Ohio State University, 1232 James Cancer Hospital, 300 West Tenth Avenue, Columbus, OH 43210-1228.** Telephone (614) 293-3716; FAX (614) 293-3112.

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

## POSITIONS OPEN

### ASSISTANT RESEARCH TOXICOLOGIST

Coordinator of Environmental Health Policy Program sought to conduct risk assessment research prioritizing chemical hazards and to develop innovative risk management options. Responsibilities include supervising students, publishing issue papers, organizing workshops and overseeing program budgets. Ph.D. in environmental health science with peer-reviewed publications on risk assessment/management issues required. Familiarity with pesticides, air pollution and/or California environmental politics preferred. Previous professional experience in environmental policy development required. Salary: \$45,100. One-year appointment with renewal pending availability of funds. Application deadline March 15, 1993. Send curriculum vitae and names/addresses of three references to: **James Robinson, Social and Administrative Health Sciences, School of Public Health, University of California, Berkeley, CA 94720.** *The University is an Equal Opportunity/Affirmative Action Employer.*

### POSTDOCTORAL FELLOW/ CHEMICAL ENGINEERING

We seek a Ph.D. in biochemistry, preferably physical biochemistry. Experience in light scattering, neutron scattering, electrophoresis, osmometry, and/or spectroscopy (FTIR, CD), would be an advantage. Primary duties are to develop the thermodynamic properties of proteins and their applications to phase equilibrium in protein separations. Applicants should submit a curriculum vitae and arrange for three evaluations to be sent by March 15, 1993, to: **Dr. Eric W. Kaler, Department of Chemical Engineering, Colburn Laboratory, University of Delaware, Newark, DE 19716-3110.** Salary is \$22,000-\$25,000 depending on qualifications and experience.

*The UNIVERSITY OF DELAWARE is an Equal Opportunity Employer which encourages applications from qualified minority group members and women.*

**RESEARCH ASSOCIATE I.** Study of different routes of immunization and antigen delivery systems in animal models; blood sample collection; serum extraction and processing; anesthetizing animals; administration of agents to stimulate flow of secretions; collection, processing and assaying for virus-specific antibodies in the samples. The hours are 8:00 a.m.-5:00 p.m., 40 hours per week. Annual salary \$19,900. Contact: **Sandra T. Starnes, Alabama State Employment Service, 3440 Third Avenue, South, Birmingham, AL 35222.** RE: Job Order #4074176.

### ALL PROFESSORIAL-LEVEL FACULTY APPOINTMENTS AVAILABLE IN ANATOMY, PHYSIOLOGY, BIOCHEMISTRY, PHARMACOLOGY, MICROBIOLOGY AND PATHOLOGY.

**Primary responsibilities:** Maximum 25% time teaching one of the above disciplines to medical students, minimum 75% of time for research. Academic rank and salary commensurate with training, teaching and research experience. Please specify your departmental preference in your reply. Send curriculum vitae and publications list, detailing teaching and research experience and interests, grant support and names of 3 references to: **Dr. Arnold L. Nagler, Associate Dean, PCME, New York College of Osteopathic Medicine, Old Westbury, NY 11568.** *Affirmative Action/Equal Opportunity Employer, M/F.*

### FACULTY POSITION

The Department of Pathology, Wayne State University School of Medicine, is seeking an investigator with research expertise in the molecular/cellular biology of breast cancer. Areas of interest include growth factors, stromal interactions, cell-cell recognition, molecular endocrinology and tumor-host interactions. The position is at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level, depending upon qualifications. Send statement of research interest, curriculum vitae, and the names of three references to: **Gloria Heppner, Ph.D., Chair, Search Committee, Michigan Cancer Foundation, 110 East Warren Avenue, Detroit, MI 48201.** All applications to be received by March 1, 1993. *Wayne State University is an Equal Opportunity/Affirmative Action Employer.*

# OPPORTUNITIES IN ONCOLOGY RESEARCH

As a result of major expansion into oncology research, the Sandoz Research Institute seeks highly motivated and creative scientists. Successful applicants will become part of multidisciplinary teams of scientists using state-of-the-art technology in modern, newly opened research facilities.

Major responsibilities for scientists in the Oncology Research Program include contributions to the discovery of novel cellular targets and therapeutic agents. Strong communication skills and participation in team-oriented collaborations with medicinal chemistry, molecular biology, cell biology and lead finding groups are required.

## BIOCHEMIST

### Junior or Senior Staff Position

Ph.D. in Biochemistry or related field with 2 or more years of postdoctoral experience in an academic and/or industrial setting. The candidate will be responsible for the purification and modification of proteins and other macromolecules. The candidate will also contribute to efforts involving enzyme assay development as part of our drug screening program.

**Position #2382.**

## MOLECULAR/CELLULAR PHARMACOLOGIST

### Junior or Senior Staff Position

Ph.D. in Pharmacology or related field with 2 or more years of postdoctoral experience in an academic and/or industrial setting. The candidate will be responsible for determining intracellular distribution, pharmacodynamics and mechanism of action of candidate drugs. **Position #2383.**

Sandoz offers comprehensive health, dental, and savings plans as well as an attractive location in north central New Jersey. For consideration, please specify the number of the position you are responding to and forward your curriculum vitae and the names and addresses of three references to:

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## DIRECTOR CLIMATIC RESEARCH UNIT

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### School of Environmental Sciences

The University is seeking to appoint a scientist of high international standing to a permanent position (as Reader or Professor) in the areas of Climate Change/Global Change. The person appointed will be Director of the Climatic Research Unit for a period of five years in the first instance, extendable by mutual agreement. The position arises from the resignation as Director of Professor Tom Wigley, on his appointment to the Directorship of the Office for Interdisciplinary Earth Studies, in Boulder, Colorado. The School is the largest Grade 5 unit in Environmental Studies/Earth Sciences in the UK.

The salary for the Readership will be within the salary range £25,969–£29,348 and for the Professorship by negotiation within the professional salary range, minimum £29,949.

Applications (five copies) should be sent to the Registrar and Secretary, University of East Anglia, Norwich, NR4 7TJ, UK from whom further particulars may be obtained. Potential applicants are welcome to consult the Dean of the School (Professor Keith Clayton, telephone Norwich (0603) 592533) and overseas applicants in particular are encouraged to intimate their intention of applying to him informally. Interviews will be held in late April/early May and the closing date for applications is 10 March 1993.

The University is an Equal Opportunities Employer.

## Experimental Hematologist

To direct hematology research on the mechanism of action of novel hematopoietic regulators *in vitro* and *in vivo* as part of a large preclinical cancer research program conducted with close participation by a pharmaceutical company; the latter offers the option, after one year of satisfactory performance, of a long-term career position. New, well-equipped laboratory space, technical support, and a substantial salary with fringe benefits. Requires a Ph.D. with some experience in hematopoietic cell culture and isolation of hemopoietic growth factors from culture.

Please submit a letter of application, curriculum vitae and letters of reference to  
**Drs. Malcolm A.S. Moore and Daniel Martin, Cancer Research, 89-15 Woodhaven Boulevard, New York, NY 11421.**

# CUTANEOUS BIOLOGY RESEARCH CENTER

Department of Dermatology

Massachusetts General Hospital



Harvard Medical School

## MASSACHUSETTS GENERAL HOSPITAL/HARVARD CBRC SCHOLARS PROGRAM

John A. Parrish MD, Director

The MGH/Harvard Cutaneous Biology Research Center (CBRC) announces a CBRC Scholars program. These Scholars will be appointed as senior research fellows to spend two years at the CBRC in research into the cellular, molecular and genetic aspects of cutaneous biology targeted by CBRC.

Candidates must have an M.D., M.D./Ph.D., Ph.D. or equivalent degree and have successfully completed at least two years of post-doctoral research training and have shown potential for independence in research. The Scholar will perform full time research on a project largely of their choice under the sponsorship of an established CBRC scientist. Salary will be commensurate with the level of experience and will range between \$40,000 and \$70,000 per year. A supply allowance will also be provided.

Specific focus areas within CBRC include but are not limited to:

- Photobiology and photoaging of skin;
- Skin aging;
- Pigment cell biology;
- Control of growth, differentiation and carcinogenesis of epidermis;
- Immunology, allergy, inflammation, and modifiers of host response;
- Physicochemical basis of skin pharmacology.

Two new Scholars will be appointed each year. For appointments which can begin as early as July 1, 1993 applications must be received by April 1, 1993. For appointments to be effective July 1, 1994, applications must be received by October 1, 1993.

For information on application procedures and forms please contact:

Mrs. Bonnie Carroll  
MGH/Harvard Cutaneous Biology Research Center  
MGH East, Bldg. 149, 13th Street  
Charlestown, MA 02129  
Tel: (617)726-4430 Fax: (617)726-2120

*The MGH/Harvard CBRC is a committed Equal Opportunity/Affirmative Action Employer. Minorities, women, handicapped and veterans are encouraged to apply.*

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## MEETING ANNOUNCEMENT

### BASIC AND APPLIED CANCER RESEARCH

April 1 - 3, 1993

**São Paulo - Brazil**

### INTERNATIONAL SYMPOSIUM ON HUMAN PAPILLOMAVIRUS

April 4 - 6, 1993

Cancer Inheritance; Biochemistry of the Transformed Phenotype; Tumor Immunology and Metastases; Etiology, Diagnosis and Epidemiology; Transformation, Immune Responses and Epidemiology of H.P.V.

Speakers:

HU Bernard, W Bodmer, R Brentani, L Brinton, A Burgess, JC Cerottini, R. Chammas, J. Cuzick, JW Dennis, N Dyson, EL Franco, M Fukuda, P Garin-Chesa, G Hart, J. Huibregtse, S Jenison, L Koutsky, I Magrath, J Malejczyk, M Manos, K Munger, N Muñoz, J Pietsenpol, M Schiffman, V. Schirmacher, E Solomon, LL Villa, K Vousden, M Waterfield

**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  
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# Scientific/Research Challenges

## BASF Bioresearch Corporation

BASF Bioresearch Corporation is a medical research company developing novel therapies for immunological disorders and cancer. Founded in 1989, we are part of a global enterprise with more than 125 years of dedication to scientific innovation. We are building a major new research facility in Worcester, Massachusetts, which will also provide significant capacity for the production of biopharmaceuticals. At our temporary location in Cambridge, Massachusetts, we have immediate openings for the following professionals:

### Senior Scientist Enzymology/Biochemistry

The successful candidate will take major responsibility for developing enzyme inhibitors as drug candidates. A Ph.D. in a relevant field with at least 2 years' postdoctoral experience is required along with an extensive background in the study of enzyme mechanisms and the chemistry of inhibitors, protein chemistry and molecular modelling. **Dept. BC1**

### Research Associate Protein Chemistry/Biochemistry

The successful candidate will develop techniques in peptide and protein sequencing analysis. Responsibilities will include RP-HPLC, amino acid analysis, enzymatic digestions of isolated proteins and automated protein sequence analysis. A BS/MS in Chemistry, Biochemistry or a related field is required together with at least 2 years' experience in electrophoresis, reverse phase chromatography, protein blotting and protein purification. **Dept. RA5**

### Research Associate Process Development

The successful candidate will work within the Process Development group to implement and optimize protocols for the characterization of recombinant therapeutic proteins. Responsibilities include methods development, assay qualification, writing of SOP's and transfer of assays to our QC group, as well as providing analytical support for ongoing process development activities as necessary. A BS/MS degree in Biochemistry and at least 2-4 years' relevant experience are required. Candidate must also have experience with HPLC, ELISA, SDS-PAGE and enzyme assays. **Dept. RA6**

BASF Bioresearch Corporation is a wholly-owned affiliate of BASF Corporation, a Fortune 100 company. Our compensation and benefits program is representative of this leading industrial position. For prompt consideration, please forward resume indicating position of interest, including department number, and salary history to: **Human Resources Department, BASF Bioresearch Corporation, 64 Sidney Street, Cambridge, Massachusetts 02139.** An Equal Opportunity Employer.

# BASF

# dkfz

## Universität Heidelberg

The Deutsches Krebsforschungszentrum (German Cancer Research Center) jointly with the University of Heidelberg establishes a clinical research unit within the premises of the University Hospitals, initially for a 5 year period. It will be the task of the unit to contribute to the cooperation between basic and clinical research. The unit will represent a division of the DKFZ. The necessary clinical infrastructure will be provided by the University.

This clinical unit will be established within the "Medizinische Klinik und Poliklinik" Abt. Innere Medizin V.

As head of this unit a

### Professorship (C4) for Molecular Hematology/Oncology

is offered.

Applicants should have a M.D. degree with experience in clinical investigations and a scientific record in cell and molecular-biological research. They should contribute to the clinical application of such research. The successful candidate should have qualifications comparable to a German Habilitation.

Applicants should submit their curriculum vitae with a list of publications and references by March 15, 1993 to **Prof. Dr. H. zur Hausen, Im Neuenheimer Feld 280, D-6900 Heidelberg, Germany.**

## POSTDOCTORAL SCIENTIST

### Renal Pharmacology

SmithKline Beecham, a world leader in pharmaceutical research, is seeking a Postdoctoral Scientist to join its multidisciplinary effort to investigate G-protein coupled receptors in the kidney and their role in renal physiology and pathophysiology. The scientist will work with Dr. William S. Spielman and his colleagues and will be involved in studies involving the molecular cloning, expression, localization and function of renal receptor systems.

Qualified candidates will have a Ph.D. in molecular or cell biology, molecular pharmacology or physiology or a related discipline and experience in standard recombinant DNA techniques. Experience in construction and screening of cDNA libraries, expression of genes in eukaryotic cells, tissue culture, RNA isolation, PCR, site-directed mutagenesis and ligand binding analysis is desired.

Our state-of-the-art research facility is located in suburban Philadelphia, near Valley Forge, PA. We offer a stimulating, innovative work environment, as well as a competitive compensation/benefits/relocation package. For confidential consideration, submit your C.V. to: SmithKline Beecham Pharmaceuticals, Senior Employment Administrator, #H0003, PO Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/D/V.



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## POSITIONS OPEN

### GRADUATE ASSISTANTSHIPS DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY

University of Illinois at Chicago

Assistantships are available for studies leading to a Ph.D. Areas of research include prokaryotic and eukaryotic molecular biology, transcriptional and translational regulation, cancer immunology, immunoglobulin gene recombination, signal transduction, bacterial chemotaxis, X-ray crystallography, biodegradation of toxic chemicals, molecular pathogenesis. Direct inquiries to: **Graduate Coordinator, Department of Micro/Immuno. (M/C 790), 835 South Wolcott, Chicago, IL 60612, USA. (FAX: 312-996-6415).**

*University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer.*

### POSTDOCTORAL FELLOWSHIPS

The UNC Lineberger Comprehensive Cancer Center of the University of North Carolina at Chapel Hill will have openings in 1992-93 for persons completing graduate studies to train with excellent investigators in basic research in tumor virology, carcinogenesis, molecular therapeutics, cancer cell biology, genetics, and tumor immunology. Training is available in recombinant DNA technology, gene expression, DNA replication, mutagenesis, regulation of cellular proliferation, growth factors, molecular immunology, molecular genetics of cancer, and combined programs. Unique training resources and core facilities are housed in the NCI-designated UNC Lineberger Comprehensive Cancer Center. Preceptors are: **Jane Azizkhan, Steven Bachenheimer, Albert Baldwin, Keith Burridge, Stephen Chaney, John Cidlowski, David Clemmons, Marila Cordeiro-Stone, H. Shelton Earp, Jeffrey Frelinger, Frank French, Don Gabriel, Jack Griffith, Stephen Haskill, Geoffrey Houghton, Brian Herman, Eng-Shang Huang, Clyde Hutchison, Kenneth Jacobson, Mary Ellen Jones, Rudolph Juliano, David Kaufman, Shannon Kenney, Ryszard Kole, Anthony Leadon, David Lee, Stanley Lemon, Edison Liu, Patricia Maness, William Marzluff, Beverly Mitchell, Howard Ozer, Joseph Pagano, Nancy Raab-Traub, James Raleigh, Aziz Sancar, Ralph Snodgrass, Ronald Swanson, Ronald Thurman, Jenny Ting, Thea Tlsty, Michael Topal, Judson Van Wyk, Jean-Michel Vos, Bernard Weissman and Richard Wolfenden.** *Candidates must be U.S. citizens or permanent residents.* Send for brochure listing faculty and apply with curriculum vitae, three letters of recommendation, a statement of research interests and graduate school records to: **Joseph S. Pagano, M.D., Director, CB# 7295, UNC Lineberger Comprehensive Cancer Center, School of Medicine, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599-7295.** *UNC's Comprehensive Cancer Center is an Affirmative Action/Equal Opportunity Employer. Minority applicants are encouraged to voluntarily identify themselves.*

### POSTDOCTORAL FELLOWSHIP Molecular Genetics of Hypertension

Enhanced renal glucocorticoid 6 $\beta$ -hydroxylation by cytochromes P450 plays a role in blood pressure elevation in the spontaneously hypertensive rat and may be a risk factor in black hypertensives. Projects include: (1) Molecular regulation of cytochromes P450; (2) Genetics of hypertension as related to renal cytochrome P450 polymorphism; and (3) Cloning, sequencing and expression of a unique corticosteroid receptor. Fellowship supported through a training grant from NHLBI. Starting stipend \$25,000. Send curriculum vitae to: **Charles O. Watlington, M.D., Ph.D., MCV Box 145, Richmond, VA 23298-0145.** *American citizenship or permanent immigrant status required. An Equal Opportunity Employer.*

**POSTDOCTORAL FELLOWSHIP** to study the uptake and transport of endogenous and anti-HIV nucleosides across biological barriers such as the placenta and the blood-brain/blood-CSF barriers. Experience with cell culture and/or isolated vesicles or microdialysis is required. Background in cell biology, molecular biology, pharmacology, toxicology or biochemistry is preferred. This position offers a unique opportunity to work in a multidisciplinary environment. Send curriculum vitae and three letters of references to: **Dr. J.D. Unadkat, Department of Pharmaceutics, BG-20, University of Washington, Seattle, WA 98195. Telephone: (206) 685-2869.** *Equal Opportunity Employer.*

## POSITIONS OPEN

**SPORE LUNG CANCER FELLOWSHIP IN PATHOLOGY.** A post-residency fellowship in Pathology funded through the NIH Specialized Program for Oncology Research Excellence (SPORE) in lung cancer is now open at the University of Colorado Health Sciences Center, Denver, Colorado. Strong interest in application of molecular biological and immunological techniques to the study of human neoplasia is essential. Interested parties please send a letter of application and curriculum vitae to: **Wilbur A. Franklin, M.D., Department of Pathology, Box B216, University of Colorado Health Sciences Center, 4200 East Ninth Avenue, Denver, CO 80262.** *The University of Colorado is committed to Equal Employment Opportunity and Affirmative Action.*

### UAB UNIVERSITY OF ALABAMA AT BIRMINGHAM

#### POSTDOCTORAL AND PREDOCTORAL FELLOWSHIPS IN MOLECULAR VIROLOGY

Postdoctoral and predoctoral traineeships are available for qualified applicants through NIH training grants in the broad areas of Viral Oncology and basic Molecular Virology. Research programs include virus structure, replication mechanisms, assembly, immune recognition, protein structure and function, oncogenesis, viral vectors, and vaccine/drug development. Viruses under study: retroviruses, including HIV and SIV, (preceptors include E. Hunter, B. Hahn, G. Shaw, P. Fultz, C. Morrow, E. Lamon), influenza viruses (G. Air, M. Luo), picornaviruses (M. Luo, C. Morrow), VSV and respiratory syncytial virus (G. Wertz), nodavirus and vaccinia virus (A. Ball), adenoviruses (J. Engler), papilloma viruses (T. Broker, L. Chow), and herpesviruses (R. Whitley, W. Britt).

Applications and inquiries should be sent to:

**Dr. G. Air or Dr. E. Hunter  
Department of Microbiology  
University of Alabama at Birmingham  
UAB Station  
Birmingham, AL 35294**

*An Affirmative Action/Equal Opportunity Employer.*

**POSTDOCTORAL FELLOWSHIP** available for start date between July 1 and December 31, 1993 in studies of phospholipid-derived mediators in signal transduction in pancreatic islet  $\beta$ -cells and of biochemical mechanisms of cytotoxic  $\beta$ -cell injury. Experience in lipid biochemistry, protein purification, or molecular biologic techniques desirable. Send curriculum vitae and references to: **Dr. John Turk, Box 8118, Washington University School of Medicine, 660 South Euclid Avenue, St. Louis, MO 63110.**

**POSTDOCTORAL FELLOW:** A position is available immediately for a postdoctoral fellow to participate in studies using *in situ* hybridization to explore human vascular disease. The goal of these studies is to define factor(s) synthesized locally in the vessel wall which contribute to inflammation, thrombosis, smooth muscle differentiation and/or proliferation in atherosclerosis and post-angioplasty restenosis. Previous experience in molecular biology, pathology, and/or cell biology is desirable. Send curriculum vitae and names of three references to: **Dr. Josiah N. Wilcox, Drawer AJ, Department of Medicine, Emory University, Atlanta, GA 30322.** *We are an Equal Opportunity/Affirmative Action Employer.*

#### POSTDOCTORAL FELLOWSHIP NEUROSCIENCE

Available immediately in the Neurosciences Unit, Loeb Research Institute, Ottawa Civic Hospital & University of Ottawa. We use *in vivo* and *in vitro* preparations, current and patch clamp recording techniques, immunocytochemistry, anatomical tracer methods and *in situ* hybridization. We study the cell biology, neurophysiology and pharmacology of CNS neurons and circuitry regulating hydromineral and cardiovascular homeostasis. Applicants with a strong background in cellular neurophysiology and/or gene expression preferred. Salary commensurate with MRC rates. Send curriculum vitae, a short statement of interests and names of 3 references to: **Dr. Leo Renaud, Neurology Division, Ottawa Civic Hospital, 1053 Carling Avenue, Ottawa, Ontario, Canada K1Y 4E9.**

## POSITIONS OPEN

### POSTDOCTORAL FELLOWSHIP

A fellowship is available in the Division of Biomedical Marine Research at Harbor Branch Oceanographic Institution. The research involves discovery of novel compounds from marine organisms which perturb mammalian intracellular signal transduction pathways relevant to immune modulation or tumor progression in humans. The division has unique capabilities in the collection of marine organisms and natural product chemistry and is establishing a laboratory capable of high capacity screening of molecular (enzyme) targets. This is a unique opportunity for an individual versed in protein purification and enzymology who would like to discover new molecular entities from the marine environment. Please contact: **Dr. Robert Wallace, Director, Division of Biomedical Marine Research, Harbor Branch Oceanographic Institution, Inc., 5600 North US 1 Highway, Fort Pierce, FL 34946; FAX: 407-461-2221, Telephone: 407-465-2400, extension 449.**

**POSTDOCTORAL RESEARCH POSITIONS** available for up to three years beginning July 1993 in the Laboratory for **MOLECULAR EMBRYOLOGY** at the University of Southern California. Opportunity to interact with a team of scientists studying molecular aspects of glucocorticoid and cytokine regulated differentiation in a well-defined mammalian genetic model. The requirements are a Ph.D. or equivalent, with experience in molecular biology. *Individuals must be U.S. citizens or permanent residents.* Send letter of inquiry, curriculum vitae, and the names of three references to: **Dr. Tina Jaskoll, USC, DEN-4264, MC-0641, Los Angeles, CA 90089-0641; FAX: 213-740-8080.** *Women and minorities are especially encouraged to apply.*

### EMORY UNIVERSITY SCHOOL OF MEDICINE

**POSTDOCTORAL RESEARCH ASSOCIATE** job open to study details of **cap binding protein/mRNA interactions** and their *in vivo* regulatory role in gene expression in liver and gastrointestinal epithelial cells. See *JBC* (1991) **266**, 3162; (1992) **267**, 11495; February 1993—in press; *Arch. Biochem. & Biophys.* (1991) **284**, 84; and *PNAS* (1992) **89**, 28. Newly renovated laboratory and major resources available in a cosmopolitan city. Experience with protein chemistry and recombinant DNA methods required. Send curriculum vitae and a short statement of research interests to: **Dr. Curt H. Hagedorn, 2101 Woodruff Memorial Building, P.O. Drawer AL, Emory University School of Medicine, Atlanta, GA 30322. FAX: (404) 727-5767.**

### VIRAL FUSION RESEARCH

**POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE** with background in biochemistry or virology desired in the Laboratory of Molecular Virology at a nonprofit research institute with outstanding and well-equipped laboratories. Opportunities for independent and collaborative studies in a supportive and active research program pursuing newly identified HIV fusion receptor polypeptides. Send curriculum vitae and two letters of reference to: **Dr. Lee A. Henderson, Guthrie Research Institute, Sayre, PA 18840-1692.** *An Equal Opportunity Employer.*

### POSTDOCTORAL FELLOW/ RESEARCH ASSOCIATE

A position is available for a scientist interested in studying integrin gene regulation and isolating genes associated with tumor metastasis in the Laboratory of Molecular Biology at the Guthrie Research Institute. The Institute offers outstanding facilities and opportunities for both collaborative and independent work in a supportive environment. Experience in molecular biology, biochemistry, or cell biology is required. Candidates should send curriculum vitae and two letters of reference to: **Dr. John D. Noti, Guthrie Research Institute, 1 Guthrie Square, Sayre, PA 18840. Telephone: (717) 882-4653; FAX: (717) 882-4703.** *An Equal Opportunity Employer.*

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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. 037, 4000 Alfred Nobel Dr., Hercules, CA 94547. An Equal Opportunity Employer, M/F/D/V.

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## STAFF SCIENTISTS *Cellular Immunology*

**Targeted Genetics Corporation**, a Seattle based company (evolved as an independent spinout of Immunex Corporation) is developing integrated gene therapy systems for the treatment of acquired and genetic diseases. A primary focus is on reconstitution of immunity to infectious and malignant disease by genetic modification and adoptive transfer of cytotoxic T cells.

We are currently recruiting Cellular Immunologists with expertise in various areas of cellular immunology. We require an emphasis on mouse and human T cell biology including *in vivo* animal models for adoptive transfer of T cell clones after modification of function by introduction of regulated genes. Experience in growing, maintaining and analyzing the function and specificity of T cells is desirable with particular emphasis on cytotoxic T cells for infectious disease and cancer. Several years of post-doctoral experience would be a distinct advantage but recent Ph.D graduates with a strong record of accomplishment are encouraged to apply. Successful candidates will work in a highly interactive environment.

Targeted Genetics offers competitive salaries and an excellent benefits package. We are located in the beautiful Pacific Northwest. For consideration, please submit C.V., names of three references and a list of publications to: **Targeted Genetics Corporation, Attn: BC/1-93, 1201 Western Ave., Seattle, WA 98101.**

## Targeted Genetics Corporation

Equal Opportunity Employer

## Discover

### ASSISTANT PROFESSOR OF BIOCHEMISTRY

## The

The Department of Biochemistry, Chicago College of Osteopathic Medicine, invites applications for a new, tenure-track Faculty position at the rank of Assistant Professor, starting July 1, 1993. Applicants must hold a Ph.D. degree in Biochemistry (or

## Osteopathic

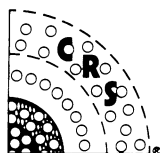
## Advantage

equivalent), have completed a postdoctoral research fellowship, and have demonstrated both ability and interest in teaching Biochemistry to health career students. The successful candidate will teach in several team-taught courses (Biochemistry, Nutrition, Genetics) for health career students (medical, pharmacy and allied health), and will develop an independent research program in Biochemistry. Interested applicants should send a cover letter summarizing their teaching experience and current research interest, and future plans; curriculum vitae; representative publications; and the names of three references. Candidates invited for interviews must also submit a teaching portfolio.

Interested applicants should send the above items to: Sandra Lee, Ph.D., Chairman, Biochemistry Department.



**CHICAGO COLLEGE OF  
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## 20th International Symposium on Controlled Release of Bioactive Materials

July 25-28, 1993

Grand Hyatt Hotel Washington, D.C., U.S.A.  
Sponsored by the Controlled Release Society, Inc.

The expanding world view of controlled release will come into focus in Washington, D.C., as leading researchers from around the world present new and contemporary topics in the fields of controlled release and delivery of drugs, biologicals and chemicals. There will be papers relating to all areas of controlled delivery, including:

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As part of this special meeting, we will present two half-days of plenary speakers who will address the current and future technical as well as biological aspects of the field.

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Telephone: 708/808-7071; Fax: 708/808-7073



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COASTAL MARINE/ATMOSPHERIC  
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PROGRAM**

Program aims to promote excellence in research in any aspect of marine sciences, related atmospheric sciences, coastal zone management, or related disciplines. Twenty-one months of stipend will be provided (\$30,000 for 12 months). Scholars encouraged to pursue own research interests and to contact faculty sponsors regarding supplementary support. Preference will be given to candidates whose interests overlap those of faculty.

Appointment available 1 September 1993. All requirements for Ph.D must be completed at time of appointment.

Applications encouraged from students near completion, and recent graduates with interest in any marine science-related discipline including atmospheric science. Candidates should send a complete resume, detailed statement of research interests and have three (3) letters of recommendation sent directly to:

DR. ROBERT ALLER  
COASTAL MARINE SCHOLAR PROGRAM  
MSRC, SUNY, STONY BROOK, NY 11794-5000

Closing date 30 April 1993.

The University at Stony Brook is an affirmative action/equal opportunity educator and employer.



**Universität Heidelberg**

The Deutsches Krebsforschungszentrum (German Cancer Research Center) jointly with the University of Heidelberg establishes a clinical research unit within the premises of the University Hospitals, initially for a 5 year period. It will be the task of the unit to contribute to the cooperation between basic and clinical research. The unit will represent a division of the DKFZ. The necessary clinical infrastructure will be provided by the University.

This clinical unit will be established within the "Universitätskinderklinik" Abt. Allgemeinpädiatrie und Poliklinik.

As head of this unit a

**Professorship (C3)  
for Clinical Molecular Oncology**

is offered.

Applicants should have a M.D. degree with experience in clinical investigations and a scientific record in cell and molecular-biological research. They should contribute to the clinical application of such research. The successful candidate should have qualifications comparable to a German Habilitation.

Applicants should submit their curriculum vitae with a list of publications and references by March 15, 1993 to **Prof. Dr. H. zur Hausen**, Im Neuenheimer Feld 280, D-6900 Heidelberg, Germany.



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**RESEARCH OPPORTUNITIES  
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Progenics Pharmaceuticals is a growing biotechnology company specializing in therapeutics and vaccines for HIV infection. The company is situated on a suburban research campus 20 miles north of New York City. Current research interests of the staff include: Analysis of the HIV envelope glycoprotein and its interaction with CD4 (the HIV receptor); Virus-induced membrane fusion; Development of viral inhibitors; Characterization of neutralizing antibodies; Development of HIV vaccines.

We are currently seeking highly motivated scientists to join our research and development team. Individuals with interests and experience in the following areas are particularly urged to apply:

**PROTEIN BIOCHEMISTS:** purification and characterization of recombinant proteins; analysis of receptor/ligand interactions; large scale purification of proteins.

**CELL BIOLOGISTS:** mammalian cell culture; transient and stable protein expression in eucaryotic cells; cellular fractionation; immunocytochemistry.

Positions are available for individuals with BS or MS degrees (with additional research experience preferred) or PhD and 0-2 years postdoctoral experience. None of these positions requires working with infectious HIV. Candidates should send their curriculum vitae, including a description of their research experience and the names and addresses of three references to:

**Human Resources, Progenics Pharmaceuticals, Inc.,  
777 Old Saw Mill River Road, Tarrytown, NY 10591.**



**Progenics**



**Molecular Biosystems, Inc. (MBI)**, a leader in the development and manufacturing of contrast agents for medical imaging, including ultrasound, CT, and MRI is seeking a strong candidate to join our expanding preclinical team.

### Associate Scientist Preclinical

Responsibilities include the initiation, design and execution of preclinical ADME Studies in support of product development.

Successful candidate must have a PhD in Pharmacokinetics (or related field) with 3+ years postdoc industrial experience in drug metabolism, IND's, NDA's, and animal studies. This position reports to the Director of Preclinical Studies.

We offer competitive salaries, a comprehensive benefits package, and a pleasant working environment. Qualified candidates should submit their résumé with salary history to: **Molecular Biosystems, Inc.**, Human Resources Department A240-93, 10030 Barnes Canyon Road, San Diego, CA 92121. Job Hotline: (619) 452-7393 x411.



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## BIOANALYTICAL CHEMISTRY

### Assistant/Associate Director

SmithKline Beecham, a world leader in pharmaceutical research, is seeking an individual to supervise our Bioanalytical Group and evaluate biopharmaceutical drug substances and proteins.

Specific responsibilities will include coordinating your group's activities to meet IND and NDA submission requirements, providing support for our process development and worldwide registration activities, analyzing experimental data, maintaining records and representing the department at external meetings.

Your qualifications must include a Ph.D. and at least five years' experience including a strong record of achievement in bioanalytical chemistry and supervisory experience. A working knowledge of GMP/GLP, protein sequencing, immunologic methods and amino acid and carbohydrate analysis is essential.

Our state-of-the-art research facility is located in suburban Philadelphia, near Valley Forge, PA. We offer a stimulating, innovative work environment, as well as a competitive compensation/benefits/relocation package. For prompt consideration, forward your C.V. confidentially to: SmithKline Beecham Pharmaceuticals, Senior Employment Administrator, #H0010, PO Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/D/V.



**SmithKline Beecham**  
Pharmaceuticals

*Challenging the natural limits.*

NYU  
Medical  
Center

### ASSISTANT RESEARCH SCIENTIST

NYU Medical Center currently has a unique opportunity available to study immune interactions in the brain. Immunology research associate/post-doctoral fellow needed to interface between basic and applied science for clinical immunotherapy trial of patients with brain tumors.

Applicant must have experience in standard immunologic techniques: cytotoxicity assays, flow cytometry, immunocytochemistry, and cytokine assays. A background in human tissue culture, in situ hybridization and PCR is highly desirable. Please send CV to: Maha Singh, Human Resources Dept., 550 First Avenue, NY, NY 10016. CVs must be received by Feb. 22. EOE, M/F.

### SENIOR MICROBIOLOGIST

As a key member of our World Class Biotechnology Group utilizing a state-of-the-art Fermentation Pilot Plant, the candidate will be responsible for participating in the management of our strain development program, as well as, formulation of strategies for the improvement of fermentation processes. An important part of this position will be interfacing with personnel from the production plant and other R&D functions. With reasonable development, this position's succession would lead directly into the Technical Services Department Manager in 2-3 years.

The candidate should have a Ph.D. in Microbiology or Biochemical Engineering with a minimum of 5 years of industrial experience. Knowledge of microbial physiology and a thorough understanding of fermentation processes is essential. Hands on experience with laboratory, pilot plant and production fermentation equipment, in addition to computer control systems, is expected. Excellent communication skills and supervisory experience is required.

The 350,000 person Augusta Metropolitan Area is centrally located in Georgia's "Classic South". Augusta enjoys a temperate climate, outstanding recreational activities, and is home to the Southeast's largest medical community. It combines an appealing blend of southern charm and contemporary opportunities.

The NutraSweet Company offers an outstanding compensation and benefits package plus the career, challenges, recognition and opportunities you deserve in life. For immediate consideration, please forward your resume to: Sheri Boots, Human Resources Specialist, The NutraSweet Company, P.O. Box 2387, Augusta, Georgia 30903.

*The NutraSweet Company*



### FERMENTATION SUPERVISOR

Pharmacia P-L Biochemicals Inc., a leader in the research production, and marketing of molecular and cell biology products, is currently seeking a Fermentation Supervisor.

You will be responsible for all aspects of plant operation including strain maintenance, process optimization, inoculum development, and large-scale fermentation.

Qualified candidates should have a minimum of a BS degree in Microbiology and several years' experience in fermentation, with the ability to manage a small facility. A solid knowledge of microbial nutrition and metabolism is desired.

We offer a competitive salary and benefit package. For consideration, send your resume and salary requirements in confidence to: Human Resources Manager, PHARMACIA P-L BIOCHEMICALS INC., 2202 N. Bartlett Ave., Milwaukee, WI 53202. Equal Opportunity Employer M/F/D/V.



**Pharmacia**

Pharmacia P-L Biochemicals

## POSITIONS OPEN

**COLLECTION REGISTRAR/DEPARTMENT OF MAMMALOGY.** Under Curator's direction, plan/supervise staff on computer-based information retrieval system; input collection data, and supervise/coordinate the renovation of new storage space and re-curation/reorganization of specimens for storage. Applicant must have a Bachelor's degree or higher in the biological sciences or related field, experience with information systems and bibliographic research. Familiarity with systematic zoological collections preferred. Salary to \$30,000 per annum, depending upon experience. Excellent benefits. Submit résumé to: **Mr. Lee Vilensky, Personnel Department (S), American Museum of Natural History, Central Park West at 79th Street, New York, NY 10024-5192. An Equal Opportunity Employer.**

**POSTDOCTORAL FELLOWSHIP** available spring 1993 for Ph.D. or M.D. experienced in molecular/cellular biology with interest in brain tumor research or neuron survival after hypoxia. Resources include viral vectors, an extensive collection of brain tumor cell cultures or rat hippocampal cultures. Send curriculum vitae and 3 letters of reference to: **Margaret K. Bradley, Ph.D., Department of Neurosurgery, Albert Einstein College of Medicine, Montefiore Medical Center, 111 East 210th Street, Bronx, NY 10467. FAX: 718-653-3284.**

## POSTDOCTORAL RESEARCH ASSOCIATES

The University of Nebraska Medical Center (UNMC), Department of Pathology and Microbiology is seeking 2 postdoctoral research associates to investigate the molecular basis of HIV pathogenesis. Expertise in molecular biology and retrovirology is preferred. UNMC provides a dynamic and interactive environment for basic and clinical research on retroviruses and AIDS. Curriculum vitae and 3 references to: **Mario Stevenson, Ph.D., Pathology/Microbiology, UNMC, 600 South 42nd Street, Omaha, NE 68198-3135. An Affirmative Action/Equal Opportunity Employer.**

## POSTDOCTORAL RESEARCH ASSOCIATES

Positions are immediately available to work on endocrine regulation of human feto placental unit, reproductive tract and brain. Interested candidates with the background and experience in static and dynamic tissue/cell culture methods and relevant techniques of cell and molecular biology and biochemistry can contact: **Dr. C. V. Rao, Department of Ob/Gyn, 438 MDR Building, University of Louisville Medical Center, Louisville, KY 40292, FAX (502) 588-0881.**

## POSTDOCTORAL RESEARCH ASSOCIATE/MICROBIOLOGIST

The Eastern Regional Research Center (ERRC), Agricultural Research Service (ARS), U.S. Department of Agriculture (USDA), has an opening for a Research Associate/Microbiologist to conduct research using immunological and molecular biological techniques for the rapid detection of *Clostridium peffringens* in precooked, uncured meat products, including microcolony epifluorescent and fluorescent antibody techniques. ERRC is located on an attractive 27-acre campus just outside of Philadelphia, in Wyndmoor, Montgomery County, Pennsylvania. It has over 250 scientists, engineers and support staff working in diverse areas of agricultural research. Employees enjoy a flexible work schedule and have access to state-of-the-art instrumentation, a computer center, and library. Candidate must have a Ph.D. in microbiology or related area and experience with application and development of immunoassay techniques, molecular biology techniques including PCR, and diagnostic microbiology techniques for food-borne pathogens is desirable. Appointment is for two years. Salary commensurate with experience (\$33,623 to \$40,298 per year). For information on application procedures contact: **Angela Canterini at (301) 344-1920.** For information on the research project contact: **Dr. Vijay K. Juneja at (215) 233-6500** or send résumé/application including transcripts and 3 references to: **Dr. Juneja, USDA/ARS/ERRC, 600 East Mermaid Lane, Philadelphia, PA 19118.** Applications in response to this advertisement must be marked 3N012.

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## POSITIONS OPEN

### RESEARCH ASSOCIATE POSITION IN MOLECULAR NEUROENDOCRINOLOGY.

Position available for studies of the pathogenesis and regulation of human pituitary tumors. Background in molecular biology required. Research includes studies of oncogene mutations, hormone receptors, *in vitro* regulation by hypothalamic peptides. Send curriculum vitae, and three letters of reference to: **Dr. Anne Klibanski, Chief, Neuroendocrine Unit, Massachusetts General Hospital, Boston, MA 02114. Affirmative Action/Equal Opportunity Employer.**

**MOLECULAR BIOLOGIST.** Campbell Research and Development, a division of the Campbell Soup Company, is seeking a molecular biologist. Responsibilities include continuation of ongoing tomato genetic improvement projects and development of molecular detection systems for seed-transmitted and food-borne pathogens. Position is available March 1, 1993. Requirements include an M.S. and demonstrated molecular biology expertise. Knowledge of genetics, RFLP's, PCR and plant biology desirable. Salary and benefits competitive and commensurate with qualifications. Send letter of application, résumé, transcripts and names of references to: **Ms. Dawn Adams, Campbell Institute for Research and Development, 28605 County Road 104, Davis, CA 95616; Telephone: 916/753-2262 extension 32, FAX: 916/753-2238.**

**NEUROPSYCHOLOGIST** needed by Columbia University's Department of Neurology for research studies of stroke, including multicenter drug trials and effects of stroke on behavior. Requirements include Ph.D. in neuropsychology and a minimum of 5 years of experience in clinical research. Applicants must have demonstrated academic productivity and capability of obtaining grant support. Salary and level of faculty appointment commensurate with experience and record. Applications to: **Dr. J. P. Mohr, Director, Stroke Center, The Neurological Institute of New York, 710 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer.**

**RESEARCH SCIENTIST II**, to develop, conduct and supervise programs for the analysis of human and animal therapeutic agents to allow establishment of quality specifications for new pharmaceutical drug substances and drug products, as well as to conduct independent research into novel analytical chemical techniques with the handling of highly potent or toxic pharmaceutical compounds, or both, and the use of advanced chromatographic and spectroscopic techniques. Ph.D. in Pharmaceutical Chemistry required. Academic background must include a minimum of one year of experience doing studies in High Performance Liquid Chromatography. Salary \$4,500 per month. Forty-hour week, 8:00 a.m. to 4:30 p.m. Send résumés and transcripts to: **7310 Woodward Avenue, Room 415, Detroit, MI 48202. Ref. No. 83992. Employer paid ad.**

The Anatomy Department of the Medical College of Ohio is reopening its search for a tenure-track or tenured **NEUROBIOLOGIST** studying neural organization at the molecular, cellular, or system level. Applicants for an assistant professorship should have demonstrated the ability to establish an independent and funded research program. Applicants for more senior appointments should have ongoing and funded programs. Teaching responsibilities will be in histology. The Medical College and the Department of Anatomy offer excellent core facilities, very competitive salaries, and generous start-up funds. Forward curriculum vitae and the names of 3 to 4 references by **February 15, 1993** to: **Dr. John T. Wall, Faculty Search Committee, Department of Anatomy, Medical College of Ohio, Toledo, OH 43699-0008. Equal Opportunity Employer.**

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## POSITIONS OPEN

### SENIOR APPLICATIONS SCIENTIST, ROBOTICS

BECKMAN Instruments has an exciting opportunity for a marketing-oriented scientist. The ideal candidate will have a Ph.D. in Molecular Biology or Immunology with at least three years of postdoctoral experience.

This high-visibility position will provide worldwide scientific support for marketing programs to maintain Beckman's leadership in laboratory robotics. Responsibilities include: applications support for Beckman customers and sales personnel; development and evaluation of new robotics applications; liaison with the scientific community; and publishing in scientific journals.

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**BIOCHEMIST—RESEARCH SCIENTIST I:** Isolate and characterize cDNA's encoding ligands for receptor tyrosine kinase specific to hematopoietic stem cell and its immediate self-renewing progeny for signal transduction and growth regulation of cells. Cloning and expression of cDNAs for stem cell homing receptors involved in stem cell adhesion to bone marrow stroma for hematopoietic development and clinical bone marrow transplantation therapy. Ph.D. Chemical Biology or a closely related field, and 3 years of experience or 3 years of Postdoctoral Research experience. Salary: \$60,000 per year. Job site/interview: Thousand Oaks. Send this ad and résumé to: **Job #NOF763, P.O. Box 269065, Sacramento, CA 95826-9065, not later than February.**

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**ASSISTANT OR ASSOCIATE PROFESSOR OF  
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A toxicologist is sought for a tenured or tenure-track, 12-month faculty position in a graduate degree program offering MS, MPH, and PhD degrees with a major in environmental health. The Division conducts health-related research in industrial hygiene, air quality, environmental chemistry, epidemiology, injury prevention and safety, microbiology, radiation, occupational health nursing and occupational medicine. Responsibilities include research, teaching, advising, service, and administration as a member of a multidisciplinary faculty. Candidates must have a doctoral degree and ability to interact and collaborate with other environmental health professionals, including physical and biological scientists, epidemiologists, and policy makers. Two years of post-doctoral experience in environmental/occupational toxicology is required for appointment to assistant professor, and five years of post-doctoral experience in environmental/occupational toxicology is required for associate professor. Excellent communication skills are essential and administrative aptitude is important. Salary will be commensurate with qualifications and experience. Starting date is no later than January 1, 1994.

Applicants should send a curriculum vitae, bibliography, names of three references, and a brief statement of interest by April 30, 1993 to:

**Dr. Donald E. Barber**  
Chair, Toxicology Search Committee  
Division of Environmental and Occupational Health  
Box 807 UMHC  
420 Delaware Street S.E.  
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**Ms. Mary Jane Hudson**  
Administrative Services Associate  
Haskell Laboratory for Toxicology and  
Industrial Medicine  
Elkton Road, P.O. Box 50  
Newark, DE 19714

**PERINATAL PHYSIOLOGIST**—The Department of Obstetrics and Gynecology at the University of Wisconsin-Madison is currently seeking a Ph.D. or M.D./Ph.D. Level of appointment is open. Large animal expertise and an interest/expertise in molecular biology/techniques. Depending on entry level, may direct Perinatal Laboratory, be responsible for research training of Perinatal Fellows and residents and for maintaining the clinical collaboration with the Division of Maternal-Fetal Medicine. This faculty member will be an active part of the Maternal-Fetal Medicine division and will report to the division head. Salaries are competitive and commensurate with experience and level of appointment. *The University of Wisconsin is an Equal Opportunity Employer and encourages inquiries from women and minority applicants.* If interested, please send curriculum vitae to: **Dr. Susan K. Hendricks, Director, Maternal-Fetal Medicine, Department of Obstetrics and Gynecology, 6C Meriter Hospital/Park, 202 South Park Street, Madison, WI 53715.**

**MOLECULAR BIOLOGIST/PATHOLOGIST** to start up and direct a molecular biology laboratory in the Department of Pathology and Laboratory Medicine at Temple University Hospital. The laboratory will provide molecular biology support services for the molecular analysis of clinical material submitted to the anatomical and clinical laboratories of the hospital. A Ph.D. in molecular biology/biochemistry/experimental pathology or an M.D. with hands-on experience in this area is required. A funded research project is a major asset. Temple University Hospital is a 500-bed tertiary care hospital with heart, kidney and bone marrow transplant programs. Send curriculum vitae to: **Henry Simpkins, M.D., Ph.D., Temple University School of Medicine, Department of Pathology and Laboratory Medicine, 3400 North Broad Street, Philadelphia, PA 19140.** *Temple University is an Affirmative Action/Equal Opportunity Employer and strongly encourages applications from women and minorities.*

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**Dr. Russell Wells**  
Biology Department  
St. Lawrence University  
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Send curriculum vitae and statement of research interests to: **Dr. Clark Distelhorst, School of Medicine (BRB), Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH 44106-4937.** *Must be American citizen or permanent resident. Minorities and women are encouraged to apply.*

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## ANNOUNCEMENTS

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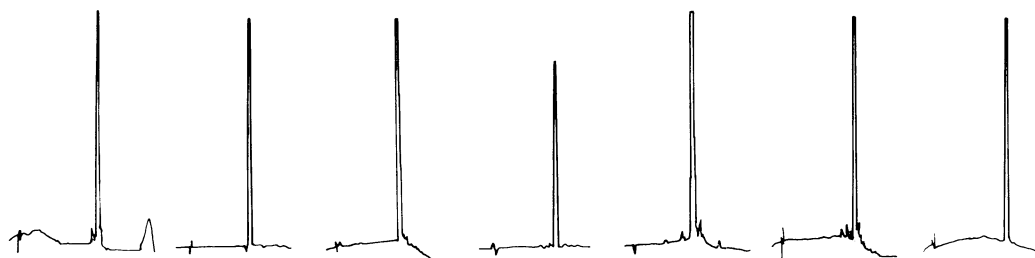


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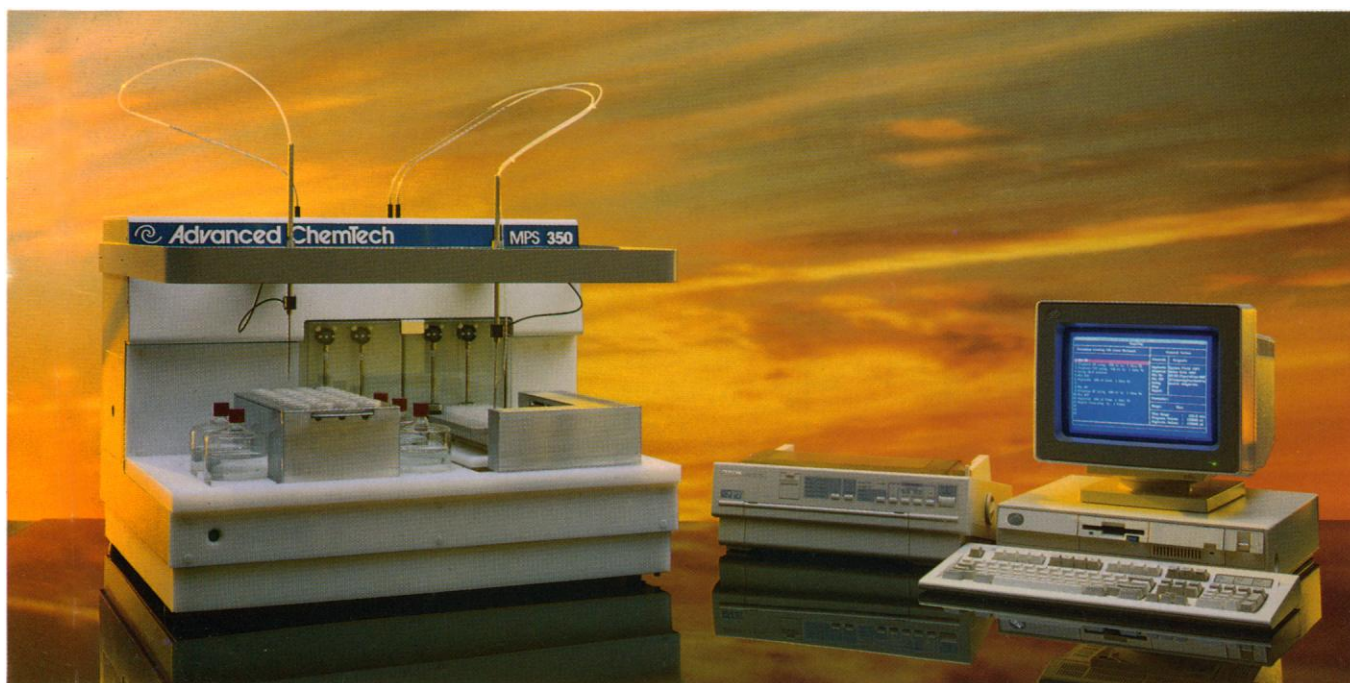
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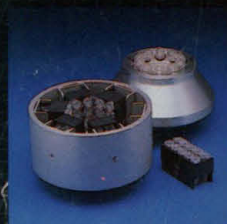
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