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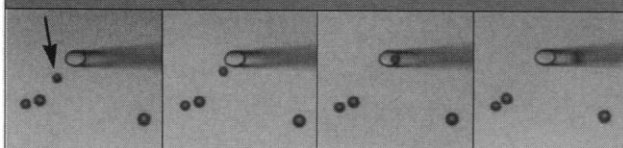
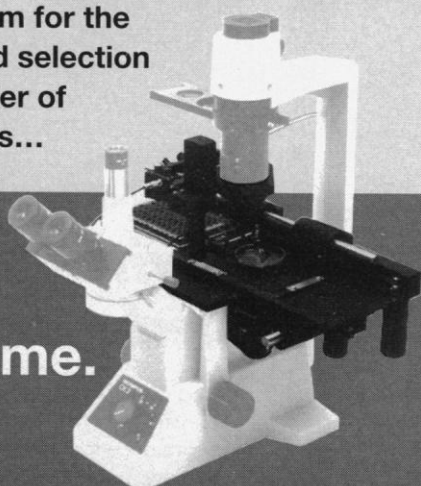
<sup>1</sup> Anal. Biochem. 179: 37-49

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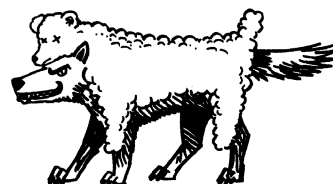
Selected cell being drawn into Quixell's glass micropipette. All other cells remain undisturbed.



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### 1994 McKNIGHT NEUROSCIENCE SCHOLARS AWARDS

The McKnight Endowment Fund for Neuroscience is soliciting applications in preparation for awarding McKnight Scholars Awards which commence July 1, 1994.

The McKnight Scholars Awards were initiated in 1976 to stimulate research in neuroscience especially as it pertains to memory and, ultimately, to a clearer understanding of diseases affecting memory. Over the years this mandate has been interpreted broadly to permit support of work in many relevant areas of neuroscience. The McKnight Endowment Fund for Neuroscience administers its awards programs through a Board of Directors comprised of eminent scientists and representatives from the Board of Directors of The McKnight Foundation which is the source of the Endowment Fund.

Up to six 1994 McKnight Scholars will be selected from applicants who hold the M.D. and/or Ph.D. degree and have completed formal postdoctoral training. Candidates should have demonstrated meritorious research in areas pertinent to the interests of The McKnight Endowment Fund for Neuroscience and should be in the early stages of establishing their own independent laboratory and research career. Candidates must be citizens or lawful permanent residents of the United States. Award payments will be made directly to a sponsoring institution which must be located within the U.S.

Each McKnight Scholars Award provides \$40,000 annually in 1994, 1995 and 1996. Funds may be used in any way that will facilitate development of the Scholar's research program. Funds may not be used for indirect costs.

Applications will be evaluated by a review committee which will recommend to the Board of Directors of the Endowment Fund candidates for appointment. Award announcements will be made on or before May 15, 1994.

Potential applicants should write or call the office of The McKnight Endowment Fund for Neuroscience to request application forms and guidelines. Completed applications must be postmarked no later than January 2, 1994.

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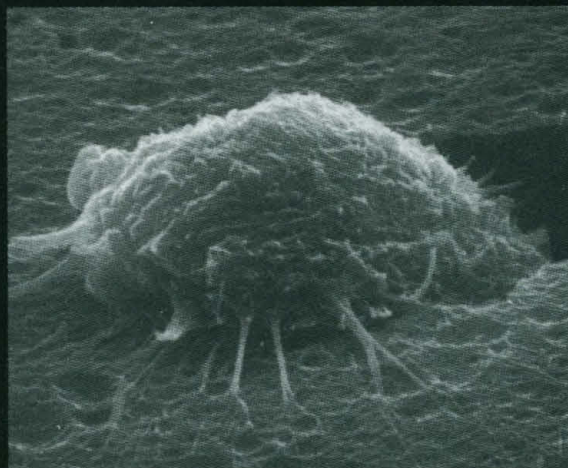
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(Left) Scanning electron micrograph of two human fibrosarcoma cells (HT-1080 cells), having digested the MATRIGEL Matrix occluding the membrane pore, migrating through an 8 micron pore in the chamber membrane.

(Inset) Micrograph of cell with numerous processes on the underside of the filter following its invasion of the matrix.

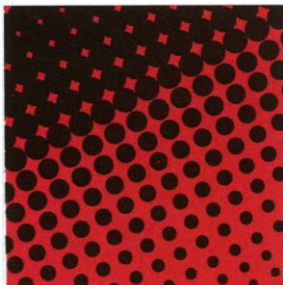
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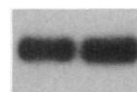
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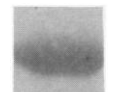
Northern blot of rat  
growth hormone  
(rGH) mRNA (1 kb)



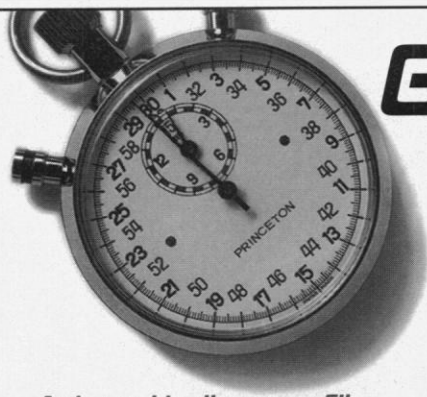
Southern blot of EcoR1  
rGH gene fragment  
(11.4 kb)



Western blot of rGH  
(22 kD)



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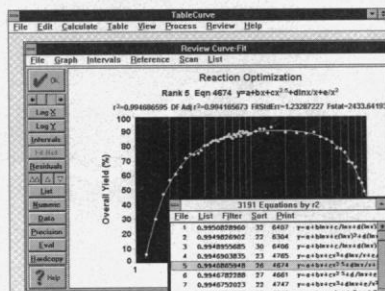


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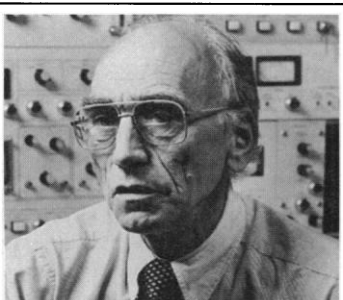
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## 1993 DISCOVERERS AWARD

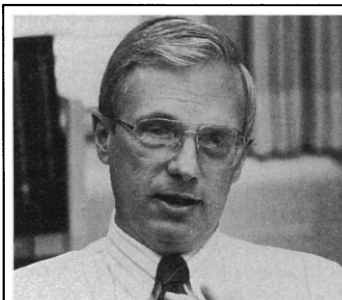
# Their successful quest has helped lift the cloud of depression for millions.



**Bryan B. Molloy, Ph.D.,**  
Lilly Research Fellow,  
Eli Lilly and Company



**David T. Wong, Ph.D.,**  
Research Advisor,  
Eli Lilly and Company



**Ray W. Fuller, Ph.D.,**  
Lilly Research Fellow,  
Eli Lilly and Company

Three scientists who spearheaded the search by Eli Lilly and Company for a safe and effective antidepressant drug that ultimately led to the discovery of Prozac®, have been selected to receive the 1993 Discoverers Award. The annual award honors the outstanding contributions of scientists from America's pharmaceutical research companies.

Each year, more than 12 million Americans are clinically depressed, often undergoing overwhelming feelings of melancholy, hopelessness and despair. For up to 15% of its victims, clinical depression causes them to take their own lives.

Medical researchers have long suspected depression to be caused, in part, by an imbalance of natural brain chemicals called neurotransmitters. Although there are antidepressant drugs that have effectively treated depression since the 1950's, they block the function of certain other transmitters, causing many undesirable, sometimes dangerous, side effects.

Finding an effective antidepressant drug with improved safety and without unwanted side effects became a mission

at Eli Lilly and Company. The search by Drs. Molloy, Wong and Fuller led to the discovery of fluoxetine (Prozac®), a drug that selectively enhances the function of one neurotransmitter, serotonin, without blocking the others.

It was the first of a revolutionary new class of antidepressants that has helped millions of people throughout the world, and in 1990 was featured on the cover of *Newsweek* as a "breakthrough drug for depression." Today, Prozac® is the world's largest selling antidepressant, having been used by over 10 million people.

While these men are being recognized in a special way, their contributions are representative of the efforts of thousands of scientists who continue the search for new medicines that can bring us longer, better lives.

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Dynabeads M-450 CD4 can be used for fast positive selection of extremely pure (>99%) and viable (>95%) CD4<sup>+</sup> T cells within 30 min from a suspension of cells such as whole blood, buffy coat, or gradient-isolated mononuclear cells. They are uniform superparamagnetic polystyrene beads coated with a monoclonal antibody specific for the CD4 membrane antigen, which is predominantly expressed on the helper-inducer subset of human T cells. During a short incubation period, the CD4<sup>+</sup> T cells bind to the beads. The rosetted cells can then be isolated and washed using a Dynal magnetic particle concentrator. **Dynal. Circle 139.**

## PCR Product Quantitation

The QPCR System 5000 provides speed, sensitivity, and flexibility for quantitative polymerase chain reaction (PCR) without the use of radioactive isotopes. The sys-

tem provides target detection down to the attomole level, adaptable protocols for different applications, and the ability to analyze 50 samples in less than 1 hour. The system features an electrochemiluminescent detection process. The light emitted from this electrically initiated chemiluminescence reaction is the basis for quantitating PCR products. With PCR technology extending beyond basic research, the ability to quantitate PCR products has become increasingly important. Conventional quantitation methods typically require isotopic assays that are hazardous, labor-intensive, and time-consuming. **Perkin-Elmer. Circle 140.**

## Unconjugated Label Remover

Bound/Free reagent removes unconjugated label from antibody conjugate preparations while maintaining the yield and activity of the conjugate. The reagent removes labels of all types: enzyme labels, radiolabels, fluorophores, and chromophores. **Middlesex Sciences. Circle 141.**

## Monoclonal Antibodies

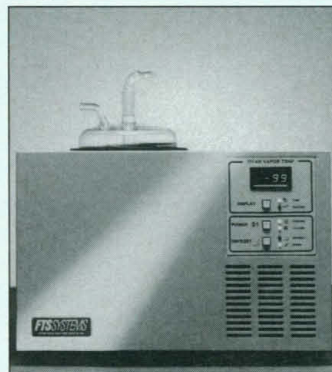
A monoclonal antibody (mAb) to human transforming growth factor  $\beta$ -1 can be used for functional neutralization, protein immunoblotting analysis, and paraffin-embedded tissue staining. **Olympus America. Circle 142.**

A new mAb (PR10A9, IgG2a) recognizes a dodecapeptide of the COOH-terminal sequence of the human progesterone receptor expressed in normal breast and uterine tissue and in breast and endometrial cancer tissues. Another mAb (clone DO1, IgG) recognizes the fixative-resistant

epitope on the NH<sub>2</sub>-terminal 45-amino acid fragment of human p53 protein in malignant colon, bladder, breast, and lung tissue as well as melanomas. Both are suitable for use with paraffin-embedded tissue sections processed by microwave technique and in flow cytometry and immunohistochemistry staining of frozen sections. **AMAC. Circle 143.**

## Freeze Dryer

The Bio-Dry freeze dryer is for drying muscle, eyeballs, and other tissue samples that require low temperature control. The shelf is temperature-controlled from -70° to +60°C to maintain small samples in the frozen state since



they cannot be adequately cooled on a manifold system. After the tissue is successfully dried, it can be embedded with resin for sectioning. The Bio-Dry can also be used with a stoppering accessory for serum bottles or an accessory manifold for drying in flasks. **FTS Systems. Circle 144.**

## Contamination Monitoring

The Reflectoquant System for contamination monitoring and analysis features the RQflex Meter, a hand-held instrument for use with Reflectoquant Test

Strips. The system enables the user to obtain test results on the parts per million level using a test strip read by a meter, with results available in 60 s. The RQflex Meter reads test strips for 30 different analytes, including chromium, nitrate, and peroxide. **EM Science. Circle 145.**

## Literature

MSRS Catalogue (for "Manufacturer's Specification and Reference Synopsis") lists more than 14,000 antibodies available from suppliers worldwide. Each antibody entry includes specifications such as host, antigen, clone number, isotype, unit size, product number, and supplier name. An appendix lists more than 2500 suppliers. **Serotec. Circle 146.**

GC Column Installation Manual includes 11 easy steps to follow in gas chromatography (GC) column installation, with photos, charts, and diagrams on the right way to cut a column, the correct shape of a methane peak, recommended head pressure settings, recommended linear carrier gas velocities, and a typical bleed profile. **J & W Scientific. Circle 147.**

Chromatography: Catalog 300 provides 800 pages of products, with sections on gas chromatography, high-performance liquid chromatography, gel permeation chromatography, ion chromatography, thin-layer chromatography, sample preparation, and analytical standards. **Alltech. Circle 148.**

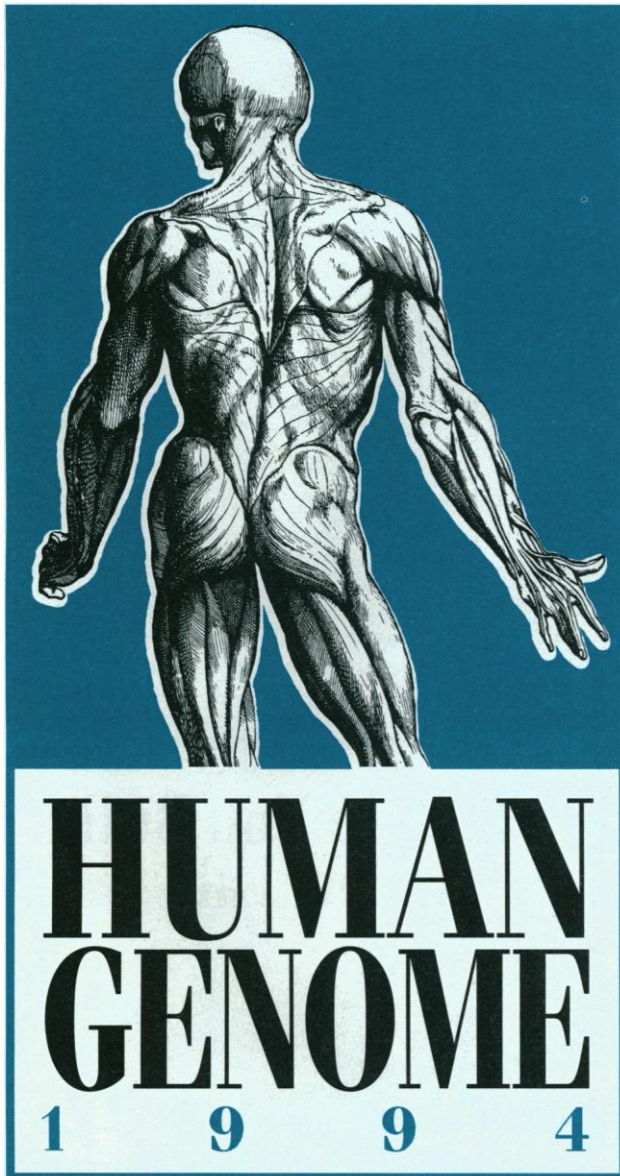
PCR Research Tools Catalog 93/94 contains 56 pages of more than 300 polymerase chain reaction (PCR)-related products. **Clontech. Circle 149.**

The Complete Guide to FT-IR: Accessories, Supplies, Microscopes details a line of products for all Fourier transform-infrared spectrometers. **Spectra-Tech. Circle 150.**

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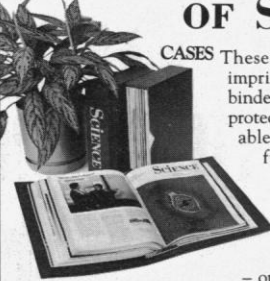
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Second attribution during the 23<sup>rd</sup> European Peptide Symposium - Braga - Portugal September, 1994.

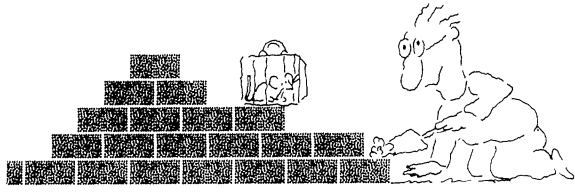
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- **Ads from Outside the U.S.:** A discount of \$30 will be offered to advertisers making payment in U.S. dollars by checks drawn on U.S. banks. Contact Annemarie Vis at +44 223 302067 (telephone) or +44 223 302068 (FAX).
- **Credit Cards:** *Science* accepts MasterCard and VISA. Discount does not apply to credit cards.
- **Cancellations:** Deadline for cancellation is 10 a.m., Tuesday, 10 days prior to issue date.

### DISPLAY PERSONNEL ADVERTISEMENTS

For rates and info. about fractional display ads (all ads 1/2 page and larger), contact:

Recruitment Advertising  
 Deborah Cummings  
 Telephone: 202-326-6541

Janis Crowley, Recruitment  
 Advertising Manager  
 Telephone: 212-496-7704  
 FAX: 202-682-0816

Annemarie Vis  
 European Recruitment Advertising  
 Telephone: +44 223 302067  
 FAX: +44 223 302 068

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

## POSITIONS OPEN

### ASSISTANT PROFESSOR NEUROBIOLOGIST

The Department of Physiology in the School of Medicine, Southern Illinois University at Carbondale, invites applications for a tenure-track Assistant Professor-level position in the area of neurobiology to begin in July of 1994. An earned doctorate is required and postdoctoral experience is preferred. The Department's present major research strength is in the area of neuroendocrine and reproductive physiology. Other active research areas in the Department include neuropharmacology, gastrointestinal, circadian, membrane, cell and molecular physiology. Applicants will be expected to have an independent research program. Strong preference will be given to candidates with current or very recent external grant support. Experience in medical or university-level teaching is also desirable. Starting salary, research facilities and start-up funds are competitive.

Applications will be reviewed beginning October 15, 1993, but the position will remain open until filled. Applicants should send a cover letter including a statement of research and teaching interests, curriculum vitae, selected reprints and the names, addresses, and telephone numbers of three references to:

**Neurobiologist Search Committee**  
**Dr. Andrzej Bartke**

Department of Physiology, School of Medicine  
 Southern Illinois University at Carbondale  
 Carbondale, IL 62901-6512

*Southern Illinois University at Carbondale is an Equal Opportunity/Affirmative Action Employer.*

### CNS PHARMACOLOGIST

The expanding Department of Pharmacology at the Northeastern Ohio Universities College of Medicine (NEOUCOM) invites applications for a tenure-track faculty position at the **ASSISTANT or ASSOCIATE PROFESSOR** level. Applicants must hold a Ph.D. in Pharmacology, have completed no less than two years of postdoctoral training and have demonstrated ability to conduct independent research. The present department has an active research program with interests in central nervous system pharmacology. Initial funding for equipment, supplies and start-up costs will be made available to the successful applicant. Laboratory and office space are provided in this new facility located on 55 acres in close proximity to a wide variety of living styles. Many opportunities are available in the geographic area for academic and scientific interactions. Some teaching experience is desirable since the position requires participation in teaching of medical and graduate students. This position is currently available and will remain open until filled. Send curriculum vitae, including the names of three references by 15 October 1993 to: **Dr. Martin D. Schechter, c/o the Office of Human Resources, Northeastern Ohio Universities College of Medicine, 4209 S.R. 44, P.O. Box 95, Rootstown, OH 44272-0095. NEOUCOM is an Equal Opportunity/Affirmative Action Employer.**

**BIOLOGY:** Southwestern University seeks a broadly trained physiologist for a tenure-track position at the level of **ASSISTANT PROFESSOR** in a liberal arts and sciences undergraduate environment. A Ph.D. and strong teaching skills are required. The successful candidate will establish a research program involving undergraduate students. Probable teaching assignments include Freshman Biology and two courses selected from Cellular Physiology, Organismic Physiology, Immunology, and Histology.

Southwestern University is a selective, undergraduate institution committed to broad-based liberal arts and sciences education. Affiliated with the United Methodist Church, it has over 1200 students and a history of stable enrollment. Southwestern's endowment of more than \$150 million ranks among the highest per student of undergraduate institutions in the country. The University is located in Georgetown, Texas, 28 miles north of Austin, the state capital and site of the University of Texas.

Send a letter of application, résumé, a description of teaching and research plans, and the names and addresses of three references to: **Biology Search Committee, Southwestern University, P.O. Box 770, Georgetown, TX 78627-0770.** Deadline for applications is October 15, 1993. *Women and minorities are encouraged to apply. Southwestern University is an Affirmative Action, Equal Opportunity Employer.*

## POSITIONS OPEN

### Massachusetts Institute of Technology Department of Biology

Applications are sought for a tenure-track faculty position at the level of **ASSISTANT PROFESSOR** in the areas of cellular, molecular, and genetic approaches to nervous system function and development.

Applicants should have significant research accomplishments, the ability to establish and maintain a vigorous research program, and a commitment to excellence in education at the undergraduate and graduate levels.

Applicants should provide curriculum vitae, a summary of research accomplishments and proposed research, and copies of key publications or preprints. Applicants should arrange that at least three letters of recommendation be sent from scientists who can evaluate their accomplishments and future research and teaching. Applications should be sent to:

**Neurobiology Search Committee**  
**Attention: Marilyn T. Smith**  
**Massachusetts Institute of Technology**  
**77 Massachusetts Avenue**  
**Building 56-511**  
**Cambridge, MA 02139**

*MIT is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are especially encouraged to apply.*

**ASSISTANT/ASSOCIATE PROFESSOR OF MICROBIOLOGY.** This tenure-track position is available September 1, 1993. Candidates should have a Ph.D., M.D., D.V.M., D.D.S., or an equivalent degree and at least 2 years of postdoctoral training. Preference will be given to applicants with research interests in **immunoparasitology or molecular parasitology.** The appointee is expected to conduct vigorous independent research and to teach microbiology to students of medicine, dentistry and other health-related professions. Generous laboratory space and start-up support will be provided. Salary is negotiable. Interested persons should submit curriculum vitae, descriptions of research interests, copies of recent publications, and the names, addresses and telephone numbers of three referees. All materials should be sent to: **Dr. John Hay, Professor and Chairman, Department of Microbiology, School of Medicine and Biomedical Sciences, State University of New York at Buffalo, 138 Farber Hall, Buffalo, NY 14214-3078.** Deadline for receipt of applications is November 1, 1993. *State University of New York is an Affirmative Action/Equal Opportunity Employer.*

**AQUATIC ECOLOGY: ASSISTANT PROFESSOR,** tenure-track position beginning January 1994. Training and experience must be compatible with ongoing research programs, including possible collaboration with faculty in the Water Resources Research Institute. Applicants must be biological limnologists with demonstrated and substantial experience in aquatic community ecology. The appointee will be expected to develop a strong research activity and productivity, vigorously seek extramural funding, and participate in teaching, recruiting, and advising undergraduate and M.S./Ph.D. students. Potential and evidence for extramural funding is required. Teaching responsibility will be an undergraduate course each semester and an aquatic ecology specialty course each year. Salary dependent on qualifications and experience. Application deadline: October 15, 1993. Applicants must have the Ph.D., postdoctoral experience, and submit a letter of application, résumé, copies of latest or significant publications, arrange for early arrival of all transcripts, and three letters of recommendation. Send to: **Dr. G. F. Larkin, Box 100, Department of Biological Sciences, Kent State University, Kent, OH 44242.**

### ANATOMY FACULTY POSITION C.W.R.U. School of Medicine

Primary responsibility will be teaching Gross Anatomy. Program in anatomical or physical anthropological research is expected. Collaborations available in Radiology, Biomedical Engineering, Neurosciences, Neurological Surgery, and Orthopaedics, and at the Cleveland Museum of Natural History and the Cleveland Clinic Foundation. Tenure-track appointment at the **ASSISTANT PROFESSOR** level, effective July 1, 1994. Send credentials to: **Dr. J. Douglas Caston, Department of Anatomy, C.W.R.U., 10900 Euclid Avenue, Cleveland, OH 44106-4930.** *An Equal Opportunity/Affirmative Action Employer.*



## STAFF SCIENTIST OPENINGS

The **Energy Analysis Program** at **Lawrence Berkeley Laboratory** is an interdisciplinary research group focusing on energy and environmental issues at local, national and international levels. Located in the Berkeley hills, the Laboratory has a spectacular view of the entire San Francisco Bay Area, whose rich and diverse culture has much to offer. As a program with extensive experience and leadership in many areas, the program has grown 15% per year for the past 4 years. In a time when energy and environmental issues are becoming a major priority in government and the private sector's planning, we are in a strong position to continue expanding in order to find solutions to increasingly imminent and challenging problems.

The program is currently seeking qualified applicants to fill up to 11 Staff Scientist positions that will lead or conduct research in the following areas:

- Residential and commercial appliances and equipment (B/1507)
- Commercial sector HVAC equipment (B/1505)
- Residential appliance efficiency (B/1504)
- Urban heat islands (B/1656 and B/1729)
- Long-term forecasting of end-use energy consumption (B/1503)
- Energy use and conservation in commercial buildings (B/1655)
- Energy use and efficiency in developing countries (B/1654)
- Energy-related environmental issues (B1629)
- Energy-efficiency policies in the US and/or formulating a national action plan to limit greenhouse gas emissions (B/1534 and B/1566)

The Staff Scientist position is a senior laboratory research position. Staff Scientists participate in the formulation, planning, execution, and evaluation of projects, and are expected to work independently. Many of the positions require experience in managing and carrying out complex projects and supervising others' work. Researchers in the Energy Analysis Program must have excellent written and verbal communication skills and work well in groups. The program's unique and non-traditional working environment encourages creative and innovative approaches to issues which cross many disciplines.

Relevant backgrounds for these positions include: electrical and mechanical engineering, physical sciences, computer science, public policy, energy and environmental studies, and economics. In most cases the successful applicant will have a Ph.D. or considerable research experience.

**LBL** offers competitive salaries and comprehensive benefits. For detailed descriptions of current job openings please contact (include job number): **Lawrence Berkeley Laboratory, Staffing Office, Box #JSCI, One Cyclotron Road, Bldg. 938A, Berkeley, CA 94720.** Lawrence Berkeley Laboratory is an Equal Opportunity Employer committed to diversity in the workplace.



**LAWRENCE BERKELEY LABORATORY**  
UNIVERSITY OF CALIFORNIA  
U.S. Department of Energy

## SENIOR MOLECULAR BIOLOGIST

Wyeth-Ayerst Research, a Division of Fortune 100 American Home Products Corporation, has an opportunity available at its pharmaceutical research facility in Radnor, Pennsylvania.

Participate in the studies of the molecular and immunological basis for human papillomavirus tumor induction and regression. Experience in tissue culture, virology and molecular biology or immunology required. This position requires a B.S./M.S. in Molecular Biology or Biochemistry with 4-5 years related laboratory experience.

Wyeth-Ayerst offers an attractive salary, comprehensive benefits package and opportunities for advancement for the right candidate. For immediate consideration, forward your resume and salary history/requirements to: **Wyeth-Ayerst Research Personnel, Dept. S-92-S, P.O. Box 8299, Philadelphia, PA 19101-0082.** Equal Opportunity Employer, M/F/D/V responses encouraged.



*Leading The Way for a Healthier World*

## BIOLOGICAL MECHANISMS AND QUANTITATIVE RISK ASSESSMENT

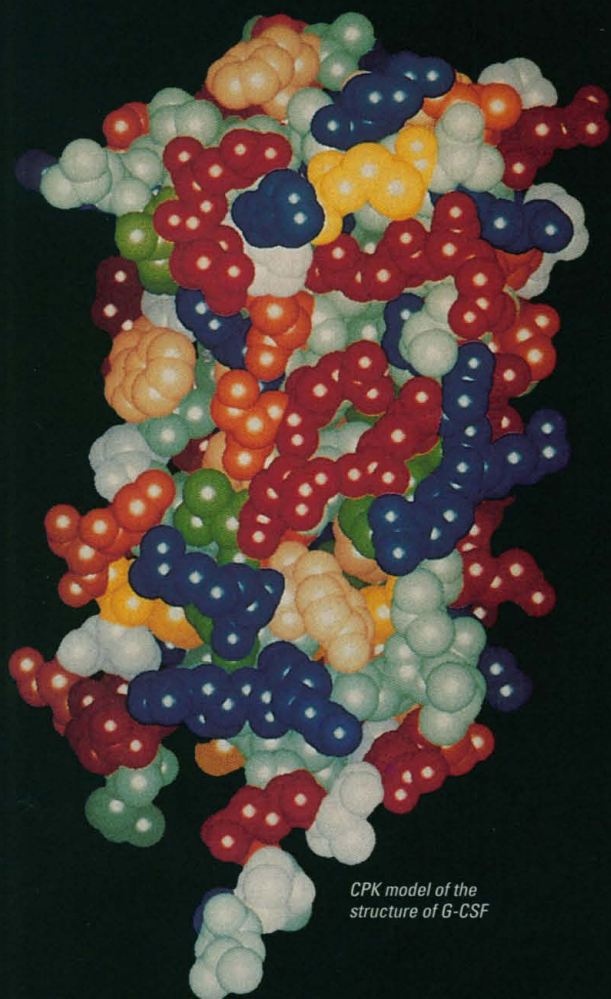
The Health Effects Research Laboratory of the U.S. Environmental Protection Agency is pleased to announce that its first annual Symposium will be held November 1-4, 1993, at the Sheraton Imperial Hotel & Convention Center in Research Triangle Park, North Carolina. The Symposium will focus on the role of biological mechanism research in future risk assessment strategies. The role of mathematical models of biological systems in integrating research activities and reducing uncertainties in the risk assessment process will be discussed. An opportunity will be provided for presenting posters on topics related to the theme of the Symposium. For more information on the Symposium or for submission of abstracts, please contact:

HERL Symposium Coordinator  
Research and Evaluation Associates, Inc.  
100 Europa Drive, Suite 590  
Chapel Hill, North Carolina 27514  
(919) 968-4961  
(919) 967-4098, (FAX)





# THE ART OF DISCOVERY



CPK model of the  
structure of G-CSF

Located in Thousand Oaks,  
California, Amgen Inc.  
currently has career  
opportunities for Research  
Scientists in the following  
disciplines:

## MOLECULAR STRUCTURE

Selected candidates will join an expanding group at Amgen whose primary responsibility is to resolve the atomic structures of proteins and other molecules that are potential targets for development as human therapeutics. You will also be encouraged to participate in an active program to develop small molecule and peptide mimetics through rational design. Our department is equipped with state-of-the-art data collection facilities for both high-field NMR and X-ray crystallography (Bruker 500 and 600 MHz spectrometers; RAXIS-II image plate area detector). UNIX-based computational resources include a Convex C340 and a variety of graphic workstations, including SGI, Evans and Sutherland, and VMS platforms. In addition to the technical requirements as described below, candidates should have a strong working knowledge of both protein modeling and molecular graphics tools, and enjoy working in a highly interdisciplinary environment.

**NMR:** Candidate should demonstrate expertise in either the practical application of multi-dimensional, heteronuclear NMR methods to protein structure determination, and/or in the computational methods used to calculate solution structures from experimentally derived distance restraints. Familiarity with UNIX and SGI workstations is desirable. Ph.D. and a minimum of 2 years postdoctoral experience in structural biochemistry or a related discipline are essential. **(Job Code OA-SC-DC-012)**

**X-ray Crystallography:** Candidate should demonstrate expertise in all aspects of protein crystallography, including crystal growth, data-collection methods, phase determination, model building and refinement. Working knowledge of software and hardware capable of achieving these steps is required. Ph.D. and a minimum of 2 years postdoctoral experience in protein crystallography are required. **(Job Code OA-SC-DC-013)**

**Postdoctoral Positions:** Structural biochemists with backgrounds in NMR and X-ray crystallography are encouraged to apply. **(Job Code OA-SC-DC-014)**

## CARBOHYDRATE CHEMISTRY

**NMR:** Candidate will join a research group working on the synthesis of biologically active molecules, particularly of oligosaccharides, and will have responsibility for the operation of a Bruker ARX 400 MHz instrument. Candidate should have excellent theoretical and practical knowledge of NMR spectroscopy, including multinuclear and 2D techniques, particularly applied to the structure determination and the conformation of oligosaccharides. Strong working knowledge of molecular modeling programs, computer systems and graphic software is required. Familiarity with mechanisms of interaction of proteins with their biological ligands necessary. Self motivation is necessary in this interdisciplinary environment in which team collaboration and individual initiative are both expected. **(Job Code OA-SC-DC-015)**

Amgen provides its staff members with a highly competitive compensation and benefits package that include a retirement and savings plan, on-site child care and fitness centers, medical/dental/life insurance plans, and three weeks vacation. For confidential consideration, please FAX/mail curriculum vitae to: **FAX: (805) 447-1985, Amgen Inc., Staffing, Job Code (See Above), Amgen Center, Thousand Oaks, CA 91320-1789.**  
We are an Equal Opportunity Employer M/F/D/V.

**AMGEN**



## POSITIONS OPEN

### EPITHELIAL CELL BIOLOGY FACULTY POSITION

A tenure-track **ASSISTANT PROFESSORSHIP** is available to conduct research in epithelial cell biology in relation to such topics as transport, assembly, and functions of mucosal immunoglobulins and molecular pathogenesis of infectious disease. Experience desirable in molecular biology, but not necessary in immunology. The individual (M.D. or Ph.D.) will direct an independent program in new research space in the overall context of an active mucosal immunology group. Access to graduate students. Send curriculum vitae, names of three references, and statement of background and interests to: **Dr. Michael E. Lamm, Chairman, Institute of Pathology, Case Western Reserve University School of Medicine, 2085 Adelbert Road, Cleveland, OH 44106-4907.**

*An Equal Opportunity/Affirmative Action Employer.*

**BIOLOGY, ASSISTANT PROFESSOR.** The Department of Biology at Agnes Scott College invites applications for a tenure-track position starting August 1994. Candidates are expected to have completed the Ph.D. by the time of appointment. Will teach courses in plant biology, ecology and field biology. Knowledge of southeastern ecosystems is desirable. Will be expected to provide sound leadership for introductory course reorganization and pedagogy; to assist in the development of a science center for women; and to be familiar with the application of technology to biological education and with issues related to the education of women in science. Scholarship may include research specialty and/or pedagogy.

Agnes Scott is a Presbyterian-affiliated, liberal arts college for women located in metropolitan Atlanta, Georgia. To ensure full consideration, applications should be received by November 8, 1993. Send letter of application describing teaching interests and scholarly plans; curriculum vitae; and names, addresses and telephone numbers of three professional references to: **Dr. John F. Pilger, Chair, Department of Biology, Agnes Scott College, Decatur, GA 30030-3797.** *Members of underrepresented groups are urged to apply. An Equal Opportunity Employer.*

### EMORY UNIVERSITY

**ANALYTICAL CHEMISTRY FACULTY POSITION.** The Department of Chemistry at Emory University invites applications and nominations for a tenure-track position in Analytical Chemistry at the **ASSOCIATE PROFESSOR** level. Areas of particular interest include bioanalytical chemistry and materials science. This is a continuation of a search started in 1992. A Ph.D. in Chemistry is required. Applicants should send curriculum vitae and an outline of research plans, and arrange for three letters of recommendation to be sent to: **Professor Joseph B. Justice, Analytical Search Committee Chair, Department of Chemistry, Emory University, Atlanta, GA 30322.** Completed applications will be considered beginning November 15, 1993. *Emory University is an Equal Opportunity/Affirmative Action Employer.*

**MICROBIOLOGIST or VIROLOGIST.** The University of Illinois College of Medicine at Peoria invites applications for a full-time tenure-track **INSTRUCTOR/ASSISTANT PROFESSOR** position, with expertise in virology or other areas in microbiology. An investigative focus in infectious diseases, mechanisms of pathogenesis or cell/molecular biology is desirable. The Department of Basic Sciences offers an excellent opportunity to develop independent and collaborative research programs within a multidisciplinary basic and clinical research environment. Duties will include development of an independent research program and teaching virology and the microbiology of infectious diseases to medical students and residents. Candidates should have an earned doctorate, at least two years of postgraduate training, and demonstrated potential for research achievement. Salary is commensurate with experience and training. Applicants should send curriculum vitae, statement of research plans and teaching experience, and names and addresses of three references to: **Dr. Marcia A. Miller, Chair, Microbiology/Virology Search Committee, Department of Basic Sciences, University of Illinois College of Medicine at Peoria, P.O. Box 1649, Peoria, IL 61656; Telephone: 309-671-8530; FAX: 309-671-8403.** *The University of Illinois is an Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

**ASSISTANT PROFESSOR OF CHEMISTRY,** Brown University, in Organic Chemistry. Applications from individuals with a doctoral degree and exceptional qualifications in organic chemistry, biochemistry, or closely related fields, and exhibiting promise for outstanding research and teaching at all levels of organic chemistry or biochemistry are invited. Postdoctoral experience is desirable. Applicants should submit complete curriculum vitae, including graduate and undergraduate transcripts, publication list, statement of research plans and requirements, and should have three letters of recommendation sent to: **Professor J. William Suggs, Search Committee, Department of Chemistry, Box H, Brown University, Providence, RI 02912.** The deadline for filing applications is November 19, 1993. *Women and minority candidates are especially encouraged to apply. Brown University is an Equal Opportunity/Affirmative Action Employer.*

### FACULTY POSITIONS IN CELL, MOLECULAR AND STRUCTURAL BIOLOGY

Applications are invited for tenure-track positions, at the level of **ASSISTANT PROFESSOR**, in the Department of Cell, Molecular and Structural Biology at Northwestern University Medical School. Applicants must have a Ph.D., M.D. or equivalent degree, postdoctoral experience, and research experience in cell, molecular and structural biology. Applicants will be screened with respect to ability to carry on vigorous, independent research and to participate in the teaching programs administered by the department. Candidates whose research interests include cell biology, biochemistry or developmental biology, particularly those employing transgenic animals, are encouraged to apply, although outstanding applicants with research interests in other areas of cell and molecular biology will be considered. Send complete curriculum vitae and a brief description of research interests and plan for future research interests to: **Dr. Rex Chisholm, Chair, Search Committee, Department of Cell, Molecular and Structural Biology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611.**

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

**DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY, UNIVERSITY OF MARYLAND AT COLLEGE PARK (UMCP)** invites applications for one tenure-track position in **biochemistry and biophysical chemistry** (with special consideration given to protein crystallography) and one in **environmental or analytical chemistry**. The positions are likely to be filled at the **ASSISTANT PROFESSOR** level, but the department can consider outstanding candidates at higher levels. *UMCP encourages applications from women and members of minority groups and is an Equal Opportunity/Affirmative Action Employer.* Submit a résumé and a short description of research plans and arrange for three letters of reference to be sent to: **Faculty Search Committee, Department of Chemistry and Biochemistry, University of Maryland, College Park, MD 20742.** For additional information, call: **Prof. G. Helz at 301-405-1797.** We will begin evaluations on November 1, 1993, but new candidates can be considered until the positions are filled.

### TENURE-TRACK ASSISTANT PROFESSOR

A tenure-track assistant professor position is available at the Center for Functional and Metabolic Imaging (CFMI), in the Department of Radiology, University of Pennsylvania. Candidates should have a Ph.D. or M.D. degree with a strong background in neuroanatomy and neuroscience, as well as an ability to work with non-human primates in PET, SPECT and MRI imaging procedures. The position will also play a key role in bridging the gap between basic chemistry, pharmacology and clinical research. Working knowledge of image analysis and development of imaging protocols for animals and humans is required. The successful candidate is expected to join the ongoing research program at CFMI and attract extramural funding. *The University of Pennsylvania is an Equal Opportunity Employer; women and minorities are encouraged to apply.* Please send résumé to: **Dr. Hank F. Kung, Room 305, 3700 Market Street, Philadelphia, PA 19104.** *Equal Opportunity Employer/Affirmative Action/M/F/D/V.*

## POSITIONS OPEN

**ASSISTANT PROFESSORS—BIOCHEMISTRY.** The Department of Biochemistry at the Albert Einstein College of Medicine is seeking Assistant Professors for appointment to the Department. Appointment of a senior position is possible for qualified candidates. Resources to initiate research programs are generous. Research strengths of the Department include enzymology and logical inhibitor design, protein structure including crystallography, protein-DNA interactions, regulation of gene expression, membrane signaling and metabolic regulation. Applicants with research interests in these areas are preferred but research excellence in related areas of biochemistry will also be considered. Send curriculum vitae and the names of three or more references to: **Ms. Joan Savastano, Administrator, Department of Biochemistry, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461.** Applications should be received before December 1, 1993. *An Equal Opportunity Employer.*

**ASSISTANT PROFESSOR**—Applications are invited for an Assistant Professor, tenure-track position in the Department of Biochemistry and Biophysics, John A. Burns School of Medicine, University of Hawaii at Manoa. The candidate must have a Ph.D. degree in Biochemistry or related field and four years of postdoctoral experience with expertise in protein dynamics and protein-nucleic acid interactions. The candidate must have teaching experience, strong publication record, and a demonstrated ability to attract extramural funding. Responsibilities include participation in medical, graduate, and undergraduate courses. The candidate is expected to maintain an active research program. Apply with curriculum vitae and names of three references to: **Chair, Department of Biochemistry and Biophysics, John A. Burns School of Medicine, University of Hawaii at Manoa, 1960 East West Road, Honolulu, HI 96822.** Closing Date: November 15, 1993. *An Equal Opportunity/Affirmative Action Employer.*

### MICROBIOLOGIST

The Department of Civil Engineering at Stanford University is seeking a microbiologist for a tenure-line **ASSISTANT PROFESSOR** position with the Environmental Engineering and Science (EES) program. Applicants with interests in environmental microbiology; microbial ecology; contaminant movement, fate, and biodegradation; reaction kinetics and thermodynamics; and/or environmental biotechnology; and having experience with modern molecular biology procedures are especially welcome. Send a résumé, undergraduate and graduate transcripts, a description of teaching and research interests, and a list of potential references by October 31, 1993, to: **Prof. Perry L. McCarty, Department of Civil Engineering, Stanford University, Stanford, CA 94305-4020.** *Stanford is an Equal Opportunity/Affirmative Action Employer.*

### TENURE-TRACK POSITION IN STRUCTURAL BIOLOGY

The School of Biological Sciences invites applications for a tenure-track **ASSISTANT or ASSOCIATE PROFESSOR** in the Division of Cell Biology and Biophysics. This position is intended to expand faculty expertise in the area of electron microscopy and diffraction, and will complement the simultaneous but independent development of a high-resolution X-ray crystallography facility. The candidate's research area in microscopy should be compatible with graduate research programs of the School emphasizing molecular structure and recognition as applied to biological molecules and their supramolecular assemblies. We seek an individual with demonstrated potential to establish independent, extramurally funded research programs, and with good communication and organizational skills. Teaching responsibilities of the School include graduate courses in the biological sciences, basic health science courses in medical and dental programs and undergraduate programs in biology. Competitive salaries, newly renovated research space, start-up funds, and excellent core facilities are available. Review of applications will begin November 5, 1993, and will continue until the position is filled. Submit curriculum vitae, statement of research goals and teaching interests, and three letters of reference to: **CBB-EM Search Committee, School of Biological Sciences, 5100 Rockhill Road, University of Missouri, Kansas City, MO 64110-2499.** *Equal Opportunity/Affirmative Action Employer.*



Howard Hughes Medical Institute

# Predoctoral Fellowships in Biological Sciences

66 Fellowships will be awarded by the Howard Hughes Medical Institute for study toward a Ph.D. or Sc.D. degree in the biological sciences listed below. Awards, based on an international competition, focus on research directed to understanding basic biological processes and disease mechanisms. Fellowships may be held at any academic or research institution with appropriate degree programs.

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## Fellowship Terms

- Full-time study toward the Ph.D. or Sc.D.
- Up to five years of support possible
- \$14,000 annual stipend
- \$12,700 annual cost-of-education allowance

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## Fields of Study

- Eligible fields:

biochemistry	genetics	pharmacology
biophysics	immunology	physiology
biostatistics	mathematical biology	structural biology
cell biology	microbiology	virology
developmental biology	molecular biology	
epidemiology	neuroscience	

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## Eligibility

- Beginning graduate study (prior study toward an M.P.H. or a medical degree does not rule out eligibility)
  - college seniors
  - first year graduate students
  - medical students and physicians (M.D., D.O., D.D.S., or D.V.M.) not past the first year of a Ph.D. or Sc.D. degree program
- Not in a funded M.D./Ph.D. program
- No citizenship requirements: U.S. citizens may study abroad, but others must study in the United States

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## Schedule

Application deadline: November 5, 1993

Awards announced: early April 1994

Fellowships start: June 1994–January 1995

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## For 1994 Program Announcements, Eligibility Guidelines, and Applications

Hughes Fellowship Program  
The Fellowship Office  
National Research Council  
2101 Constitution Avenue  
Washington, D.C. 20418, United States of America  
Telephone (202) 334-2872

The Howard Hughes Medical Institute, an Equal Opportunity Employer, welcomes applications from all qualified candidates and encourages women and members of minority groups to apply.



## Post-Doctoral Position

The National Cancer Institute, National Institutes of Health, Public Health Service, requests applications for a Post-Doctoral Fellow located in the Medical Ovarian Cancer Section of the Medicine Branch, Clinical Oncology Program in Bethesda, MD. Salary range is \$28,000 - \$40,000.

### Qualifications:

- American citizen or permanent resident
- At least three years practical experience, as demonstrated by scientific publications, in the measurement of expression levels of human DNA repair genes in:
  - a) fresh human tissues,
  - b) tissue culture materials.
- At least three years practical experience, as demonstrated by scientific publications, in the measurement of clinically relevant levels of DNA damage from anti-cancer agents in:
  - a) fresh human tissues,
  - b) tissue culture materials.
- At least three years practical experience in training others in the techniques involved in the measurement of DNA repair gene expression, and clinically relevant levels of DNA damage from anti-cancer agents.

All applications should be sent to:

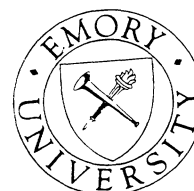
**Robert Wittes, M.D., Chief  
Medicine Branch, COP, DCT  
National Cancer Institute  
Building 10, Room 12N212  
9000 Rockville Pike  
Bethesda, MD 20892**

All applications must be post-marked within 30 days of the date of this issue of SCIENCE. All applications should include the following:

- a) Curriculum vitae and bibliography
- b) Cover letter including date and place of birth, and if indicated, proof of permanent U.S. residency
- c) C.V. should detail education and training, as well as current resident.

NCI is an Equal Opportunity Employer

## DIRECTOR OF THE YERKES REGIONAL PRIMATE RESEARCH CENTER EMORY UNIVERSITY Atlanta, Georgia



Emory University seeks a new Director of the Yerkes Regional Primate Research Center. The Director is the chief administrative and scientific leader of this federally supported research center and reports to the Vice President for Health Affairs/Director of the Woodruff Health Sciences Center.

Emory University, a private university, has an enrollment of 9,800. The University's academic divisions include Emory College and Oxford College; the Graduate School of Arts and Sciences; the Schools of Business, Law, Medicine, Nursing, Public Health, and Theology. The Health Sciences Center also includes two major teaching hospitals and five affiliate hospitals.

The Yerkes Center is dedicated to the improvement and enhancement of human health and welfare through the study of nonhuman primates and consists of 6 divisions: behavioral biology, neurobiology and vision, pathology and immunobiology, reproductive biology, administrative services, and animal resources. The Yerkes Center has 169 faculty and 140 support staff with a total operating budget of \$12.2 million.

Qualifications include the following: a doctoral degree in one of the health science disciplines; tenurable at the rank of full professor; significant scientific and administrative responsibilities and accomplishments in biobehavioral or biomedical research; a national reputation as a scientist, preferably involving nonhuman primates; and a collegial and collaborative management style.

*Nominations, applications and requests for information should be directed to:*

Mahlon R. DeLong, M.D.  
Chair, Director of the Yerkes Center Search Committee  
c/o Paula Carabelli  
Korn/Ferry International  
1800 Century Park East, Suite 900  
Los Angeles, California 90067  
(310) 552-1834

Each candidate is asked to submit a letter of interest; a current curriculum vitae; and the names, positions and phone numbers of five references who will be contacted only after candidate's approval and at the appropriate time. Screening will be on October 29, 1993.

*Emory University is an EEO/AA employer and strongly encourages all to apply.*

## THE McDONNELL SUMMER INSTITUTE IN COGNITIVE NEUROSCIENCE THE UNIVERSITY OF CALIFORNIA, DAVIS JULY 10 - 23, 1994

The seventh annual Summer Institute is a two week course to examine how information about the brain bears on issues of cognitive science and how approaches in cognitive science apply to neuroscience research. A distinguished faculty will lecture on current topics in brain plasticity, strategies of neuroencoding, and evolution. Laboratories and demonstrations will provide practical experience with cognitive neuropsychology experiments, connectionist/computational modeling and neuroimaging techniques. At every stage, the relationship between cognitive issues and underlying neural circuits will be explored. The Foundation will provide room/board and limited support for travel.

For information and applications  
please write to:

The Center for Neuroscience  
UC Davis  
Davis, CA 95616 USA

APPLICATION DEADLINE:  
JANUARY 15, 1994

## ASSISTANT/ASSOCIATE PROFESSOR UNIVERSITY OF MINNESOTA DEPARTMENT OF LABORATORY MEDICINE AND PATHOLOGY

Several faculty positions are available, at the rank of assistant professor (tenure track) or associate professor (tenured) in the Department of Laboratory Medicine and Pathology to begin in 1994 or at a mutually agreeable time. Minimum requirements are an M.D., Ph.D. or equivalent degree with at least three years postdoctoral training and demonstrable expertise in molecular biologic approaches to understanding disease processes. Individuals should complement existing strengths in the department including cancer biology, extracellular matrix biology, immunology, vascular biology, signal transduction or molecular genetics of disease. Recruitment goal is to fill at least one position with one individual with a major focus in cancer biology, one in vascular biology and one in immunology. Candidates for assistant professor must have demonstrated involvement in high quality research with publications in highly regarded peer reviewed journals; those for associate professor must have professional distinction in national grant-supported research and demonstrated effectiveness in teaching and advising. Candidates will be expected to develop or continue externally funded, independent research programs and participate in teaching of graduate, postdoctoral students and residents.

The department has a strong commitment to basic research, as evidenced by \$10 million in sponsored funding currently supporting faculty research programs. Opportunities are available for interactions with the Biomedical Engineering Center, Institute of Human Genetics, and the Cancer Center. The department offers competitive salaries and start-up support.

Deadline for receipt of applications is December 1, 1993.

Applicants should send a curriculum vitae, statement of research interests, and names and addresses of three persons who may be contacted for references to:

Assistant/Associate Professor  
Search Committee (MM)  
c/c Marilyn Green, Box 198 UMHC  
420 Delaware St. S.E.  
Minneapolis, MN 55455

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



**PROGRAM OF EXCELLENCE IN  
MOLECULAR BIOLOGY OF THE HEART AND LUNG  
Special Postdoctoral Positions**

The University of Cincinnati Program of Excellence in Molecular Biology of the Heart and Lung, funded by the National Heart, Lung and Blood Institute of NIH, has as a goal the application of molecular genetic approaches to study heart and lung function. Postdoctorals work closely with the sponsor in initial years but are encouraged to develop a research program separate from that of the sponsor and apply for independent funding during the final year.

The Program is open to Ph.D.s or M.D.s with training in molecular genetics who wish to apply their skills to significant problems of heart or lung or to individuals with strong backgrounds in heart and lung who wish to develop molecular genetic tools for continued study of these problems. We are particularly interested in recruiting minorities to the Program. Stipends begin at \$30,000 per year with benefits. Openings are available in several of the laboratories listed below.

*Na,K-ATPase gene regulation and structure-function studies including identification of the cardiac glycoside binding site using site specific mutagenesis.* Jerry B Lingrel

*Characterization of lung surfactant proteins and genes.* Jeffrey Whitsett

*Collagen gene expression in the heart and lung.* Winston Kao

*Structure-function relationships and genetic regulation of ion-transport proteins of heart and lung.* Gary Shull

*Targeted modification of the cardiac contractile proteins and growth and developmental control of cardiac muscle.* Jeffrey Robbins

*Manipulating genes important in heart and lung development by insertional mutagenesis and targeted modification in ES cells.* Steven Potter

*Structure, function and regulation of Ca<sup>++</sup> channel proteins (heart, brain, vascular smooth muscle) and gene regulation; isolation of receptors for calcium antagonists.* Arnold Schwartz

*Role of apolipoproteins in heart and lung development and in resistance to disease.* Judith Harmony

*Targeted modification of genes important in cardiovascular development and disease.* Thomas Doetschman

*The genetics of human cardiovascular disease.* Anil Menon

Applicants should submit a C.V. and the names of three references to **Jerry B. Lingrel, Ph.D., Director, Program of Excellence in Molecular Biology, Department of Molecular Genetics, Biochemistry and Microbiology, University of Cincinnati College of Medicine, Cincinnati, Ohio 45267-0524.**

*Affirmative Action/Equal Opportunity Employer*



**WEST VIRGINIA UNIVERSITY  
ROBERT C. BYRD  
HEALTH SCIENCES CENTER**

**Director**

**Mary Babb Randolph Cancer Center**

The West Virginia University School of Medicine invites applicants for the position of Director of the Mary Babb Randolph Cancer Center. The newly constructed cancer center contains state-of-the-art technology for the diagnosis and treatment of all forms of cancer, merging quality patient care with education, research and outreach programs. The center is immediately adjacent to the new Ruby Memorial Hospital and a PET Center scheduled to open late 1993.

The Director must be a widely recognized leader in the mainstream of cancer treatment, research and education. Applicants should hold a M.D. and/or Ph.D. degree with proven ability in scientific program planning and administration, and be able to interact effectively with faculty from all segments of the University, health care practitioners, elected state and public officials, and the lay public. The Director will have responsibility for and authority over all cancer center personnel, facilities, core services, equipment and budgets, and reports directly to the Vice President for Health Sciences/Dean, School of Medicine.

The search will remain active until the position is filled, however, those applications received by **October 29, 1993** will be assured of consideration during the first cycle of review. Applicants should send curriculum vitae and names of three references to:

**Edward H. Stullken, Jr., M.D.  
Chairman, Cancer Center Search Committee  
Chairman, Department of Anesthesiology  
P.O. Box 9134**

**WVU School of Medicine  
Morgantown, WV 26506-9134**

*An Equal Opportunity/Affirmative Action Employer*

# HUMAN GENOME RESEARCH

**S**mithKline Beecham Pharmaceuticals, a worldwide leader in pharmaceutical research, has several scientific opportunities available for the support of Human Genome research.

## SCIENTIFIC PROGRAMMERS

The successful candidate will develop computational biology software for data analysis and management, and provide user support in a networked multi-platform computing environment including Silicon Graphics workstations, Sun SPARC stations, MACs and PCs.

Requirements include a BS in Computer Science or related field; preference will be given for molecular biology education or experience. Advanced degree in computing, or the chemical or biological sciences preferred. Consideration will be given to biologists with strong computer backgrounds. Experience with MACs, Windows, networking, databases, and UNIX, and C, C++ and Fortran programming languages desirable. Refer to code #M095.

## SCIENTIFIC COMPUTING CONSULTANTS

The successful candidates will develop methods, algorithms, and software for data analysis and management of biological sequence databases.

Requirements include a Ph.D. and 3+ years of postdoctoral training. Experience in comparative sequence analysis, pattern recognition, system/database design. Specific familiarity with genomic research and computer applications in biology are essential. Experience with MACs, Windows, networking, databases, UNIX and C, C++ and Fortran programming languages preferred. Refer to code #M096.

SmithKline Beecham offers competitive compensation and benefits packages. For confidential consideration, please submit your resume and salary requirements, indicating desired job code #, to: SmithKline Beecham Pharmaceuticals, Sr. Employment Administrator, 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.*

## POSITIONS OPEN

### FACULTY POSITION IN REPRODUCTIVE/ DEVELOPMENTAL BIOLOGY UNIVERSITY OF MISSOURI-COLUMBIA

The University of Missouri-Columbia invites applications for a tenure-track position of **ASSISTANT PROFESSOR** within the College of Agriculture, Food and Natural Resources. The successful candidate will hold a Ph.D. degree and have had at least two years of postdoctoral training. The research program will be housed in the Animal Science Research Center and is part of the Food for the 21st Century Program which provides funds for research and core facilities and for graduate student and postdoctoral training. The individual selected will join a sizable interdisciplinary group conducting basic research on early embryonic development and reproductive processes in the female mammal.

Candidates should have a background in reproductive biology with training in cell, molecular or developmental biology. Applicants for the position should send curriculum vitae and a description of research experience and interests and provide the names of three individuals who can provide letters of reference to: **Dr. R. Michael Roberts, 158 Animal Science Research Center, University of Missouri, Columbia, MO 65211** before December 1, 1993. Telephone: 314-882-7957; FAX: 314-882-6827.

*The University of Missouri is an Equal Opportunity/Affirmative Action Employer and specifically invites and encourages applications from qualified women and minorities.*

### IMMUNOGENETICS

As of August 1, 1993, the Department of Pediatrics of the University of Pittsburgh, School of Medicine is seeking a non-tenure-stream **RESEARCH ASSISTANT PROFESSOR** for the Division of Immunogenetics located at the Rangos Research Center, Children's Hospital of Pittsburgh.

Applicant must have a Ph.D. degree and a specialization in pediatric endocrinology, together with postdoctoral experience that demonstrates research excellence in both the manipulation of nucleic acids and the application of molecular techniques to the studies of sex-related syndromes and autoimmune diseases.

Successful candidate must develop a competitive, independent research program supported in part by external research funding. The selected applicant will direct graduate student research and participate in both undergraduate and graduate teaching.

Please forward curriculum vitae, a brief description of research goals and teaching interests, and the names, addresses, telephone and FAX numbers of at least three references. Applications will be accepted until December 30, 1993.

Please submit to: **Dr. Massimo Trucco, Division of Immunogenetics, Department of Pediatrics, Rangos Research Center, Children's Hospital of Pittsburgh, 3705 Fifth Avenue at DeSoto Street, Pittsburgh, PA 15213-2583.**

*The University of Pittsburgh is an Equal Opportunity Employer.*

### ESTUARINE ECOLOGIST

The Department of Biology invites applications for a tenure-track faculty position at the rank of **ASSISTANT or ASSOCIATE PROFESSOR**, for an estuarine ecologist with an interest in salt marsh systems, to commence September 1994. Successful applicants shall have a Ph.D. The candidate we are seeking will exhibit a strong commitment to undergraduate teaching and is expected to conduct his/her own experimental research. Initial responsibilities will consist of teaching a required Biology majors' Ecology course with field laboratories. Experience should include: land use planning and assessment, applied ecology, and habitat restoration. Developing courses in the candidate's specialty, participating in the introductory biology course, student advising and career guidance are also required. Demonstration or promise of successful grant writing expected.

Send letter of application, curriculum vitae, three letters of reference and a statement of teaching and research goals by 1 November 1993 to: **Search Committee Chairman, Biology Department, Fairfield University, Fairfield, CT 06430.** Fairfield University is located on Long Island Sound, 25 miles from New Haven and 50 miles from New York City, and is an Equal Opportunity/Affirmative Action Employer.

## POSITIONS OPEN

### DEPARTMENT OF CHEMISTRY Analytical Chemistry

The Department of Chemistry, University of British Columbia, invites applications for a tenure-track or higher level **PROFESSOR** in analytical chemistry, starting 1 July 1994. A Ph.D. (postdoctoral experience), and strong research track record are required. The successful candidate will be expected to teach chemistry courses at the undergraduate level and graduate level and to develop a vigorous and creative research program. The salary will be commensurate with education and experience.

*The University of British Columbia welcomes all qualified applicants, especially women, aboriginal people, visible minorities and person with disabilities. The position is subject to final budgetary approval and, in accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents.*

Applications should consist of curriculum vitae, list of publications, summary of research interests, a detailed research proposal, and the names and addresses of at least three references. The applicant should arrange for the complete application and letters of reference to be sent before closing date of December 1, 1993, directly to: **Professor M. Blades, Chairperson, Future Appointments Committee, Department of Chemistry, UNIVERSITY OF BRITISH COLUMBIA, 2036 Main Mall, Vancouver, B.C. CANADA V6T 1Z1.**

### FACULTY POSITION MOLECULAR MYCOLOGIST

Department of Plant Pathology  
University of California, Riverside

Applications are invited for an 11-month tenure-track position available July 1, 1994, as **ASSISTANT PROFESSOR** of Plant Pathology in the College of Natural and Agricultural Sciences (21%) and **ASSISTANT PLANT PATHOLOGIST** in the Agricultural Experiment Station (79%). Salary will be commensurate with qualifications and experience and based on the UC pay scale. Appointee is to develop an innovative research program in molecular genetics of fungal plant pathogens. It is anticipated that the faculty member will develop a strong basic and applied program employing molecular genetic approaches to the identification and/or control of plant pathogenic fungi. Teaching responsibilities will involve mycology and plant pathology courses and direction of graduate student research in plant pathology and the interdepartmental genetics group. Ph.D. degree in Plant Pathology or related biological fields required with postdoctoral training or experience in plant pathology and modern molecular genetics of fungi. Curriculum vitae, statement of research interests, reprints of relevant publications, transcripts and three confidential letters of recommendation should be sent to: **Dr. N. T. Keen, Search Committee Chairman, Department of Plant Pathology, University of California, Riverside, CA 92521.** The application deadline is December 1, 1993, or later if a suitable candidate has not been selected from the original pool.

*Women and minority candidates are encouraged to apply.  
An Equal Opportunity/Affirmative Action Employer.*

### ROBERT E. MAYTAG CHAIR IN ORNITHOLOGY

The Department of Biology at the University of Miami invites applications and nominations of distinguished scientists to fill an endowed chair. We seek candidates who are making outstanding contributions in ornithological investigation, including senior scientists and exceptionally well-qualified individuals currently at the associate professor level. The successful candidate will join a department with major research and doctoral programs in Behavior, Ecology, and Evolution.

Nominations and applications should be submitted to the Search Committee at the address below by November 1, 1993. Applicants should send a statement of research interests and plans, curriculum vitae, selected publications and arrange to have three letters of reference sent to:

**Dr. Jay M. Savage, Ornithology Search  
Department of Biology, University of Miami  
P.O. Box 249118  
Coral Gables, FL 33124-0421  
Telephone: (305) 284-2130; FAX: (305) 284-3039**

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

## POSITIONS OPEN

### DEVELOPMENTAL BIOLOGIST

The Department of Biological Sciences at the University of Illinois at Chicago (UIC) invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level. We seek applications from individuals whose research emphasizes molecular and genetic approaches to the understanding of animal development. Interests may include, but are not limited to, development of the nervous system, organization of embryonic axes, and cell interactions affecting developmental decisions. Review of applications will begin November 1, 1993, and will continue until the position is filled. Send curriculum vitae, a brief statement of research plans and three letters of reference to: **Developmental Biologist Search Committee, c/o Dr. Sidney B. Simpson, Jr., Head, Department of Biological Sciences, University of Illinois at Chicago, 845 West Taylor Street, Chicago, IL 60607.** UIC is an Affirmative Action/Equal Opportunity Employer.

### University of Alabama at Birmingham Schools of Medicine and Dentistry CHAIRMAN DEPARTMENT OF CELL BIOLOGY

The University of Alabama Schools of Medicine and Dentistry, UAB, are seeking applications and nominations for the position of Professor and Chairman of the Department of Cell Biology. The person filling this position will assume the leadership of a strong, mature faculty and will have an opportunity to expand the department in new directions. The department's research and office space is partially housed in a recently completed basic health science building. The department includes 18 tenure-track faculty members participating in both graduate and professional teaching.

The applicant must have a Ph.D., M.D., or equivalent degree, be internationally recognized for research in cell biology, have a commitment to graduate and medical education, and have a record of demonstrated leadership in administrative activities. The successful candidate is expected to be an established scientist with a strong ongoing, independent and well-funded research program.

The Search Committee, headed by **William J. Koopman, M.D.,** Director of Immunology/Rheumatology, will review the application. Interested applicants should submit curriculum vitae including the names of three references to:

**Amy Thompson, Director  
Administrative Services-School of Medicine  
University of Alabama at Birmingham  
MEB 310E, University Station  
Birmingham, AL 35294-3293**

*An Equal Opportunity/Affirmative Action Employer.*

### BIOLOGICAL SCIENCE ADMINISTRATOR

Applications are invited for **CHIEF, LIFE SCIENCES DIVISION (GM-15),** U.S. Army Dugway Proving Ground, Utah. The incumbent will direct the planning, coordinating and performance of Dugway's Biological Defense Testing Program. Testing of biological detection, protection and decontamination systems is performed with pathogens, toxins and simulant materials. An aggressive test methodology development program is pursued. The chief will direct all activities performed by civilian, contract and military personnel in the division. *U.S. citizenship and top secret clearance will be required.* Salary \$66,609 to \$86,589 per annum. Contact: **Ms. Jackie Wilde, Civilian Personnel Office, Dugway Proving Ground, Dugway, UT 84022-5000; Telephone: (801) 831-2181,** Monday to Thursday, 7:00 a.m. to 5:30 p.m. MDT for application packet. *An Equal Opportunity/Affirmative Action Employer.*

### DIRECTOR OF CLINICAL STUDIES

Ophthalmology Department seeks director of clinical studies. Qualified candidate should have MSPH with epidemiology experience or advanced degree in epidemiology. Experience running large clinical studies, ophthalmic studies preferred. Qualified candidates contact: **Dr. Eric M. Lasater, John A. Moran Eye Center, University of Utah, 50 North Medical Drive, Salt Lake City, UT 84132.** University of Utah is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities.



**CHAIR  
DEPARTMENT OF PEDIATRICS  
UNIVERSITY OF CALIFORNIA,  
LOS ANGELES**

Applications and nominations are invited for the position of Executive Chair of the Department of Pediatrics at the UCLA School of Medicine.

She/He will provide leadership and direction for the teaching, clinical, research and development programs of the Department.

Candidates are requested to submit curriculum vitae to:

Pediatric Chair Search Committee  
c/o Dennis J. Slamon, M.D., Ph.D.  
UCLA School of Medicine,  
11-934 Louis Factor Building,  
10833 Le Conte Avenue  
Los Angeles, CA 90024-1678.

*UCLA is an equal opportunity/affirmative  
action employer.*

DHHS, PHS, Food and Drug Administration, Center for Biologics Evaluation and Research, Rockville, Maryland, is searching for outstanding physicians and scientists interested in a challenge by participating in the development and approval process for new biological products. The Center's mission is to protect and enhance the public health with respect to vaccines, biological therapeutics, and the blood supply. As members of a multidisciplinary team of scientists, the incumbents will work as reviewers in the approval process for new biological products. Some positions offer the unique opportunity to conduct biomedical research in combination with review responsibilities. These positions have a high degree of independence and involve complex medical, scientific, and regulatory issues. Opportunities for professional development may include further training, attendance at scientific meetings and conferences, and clinical activities. **Qualifications: Physicians** must have completed all requirements for a Doctor of Medicine or Osteopathy Degree from an accredited institution. Graduates of foreign medical schools must submit a copy of their permanent Educational Commission for Foreign Medical Graduates (ECFMG) certification. Physicians should be board eligible or certified in a primary specialty or have completed at least four years of residency training or possess equivalent experience. **Scientists**, doctoral level degree in biological or physical sciences, pharmacology, toxicology, or related disciplines, along with advanced training and/or experience in the development, manufacture or testing of biologics is desirable. In addition, all candidates should have highly developed analytical, written and oral skills, as well as the ability to research problems and issues and to use mature judgment in problem solving. Candidates for Civil Service or Commissioned Corps appointments must be U.S. citizens. Candidates for fellowships may be either U.S. citizens or resident aliens eligible for citizenship within four years. **Salary:** For **physicians**, Civil Service salary range for GS-13 through GS-15 is \$59,099 to \$91,029 per annum. In addition, physicians may also be eligible for a physicians' comparability allowance up to \$20,000 per annum. For **scientists** (other than M.D.), Civil Service salary range for GS-11 through GS-15 is \$33,623 to \$86,589 per annum. Salary, benefits, research support, and level of responsibility are commensurate with education and experience. Also, positions may be filled by appointment in the U.S. Public Health Service, Commissioned Corps, or in the Fellowship Program, with commensurate salary and benefits. Interested candidates should send a detailed Curriculum Vitae with bibliography, statement of regulatory/research interest, transcripts, and names of three references to: Food and Drug Administration, Center for Biologics Evaluation and Research, 1401 Rockville Pike, Rockville, Maryland 20852-1448, Attention: General Recruitment Coordinator (88) and/or Equal Employment Opportunity Recruitment Coordinator (93).

**FDA IS AN EQUAL OPPORTUNITY EMPLOYER  
AND HAS A SMOKE FREE ENVIRONMENT**



**NATIONAL UNIVERSITY OF SINGAPORE  
DEPARTMENT OF PHYSIOLOGY**

Applications are invited for faculty appointments in the Department of Physiology.

Candidates should have an MD or PhD degree or equivalent and have had at least two years of postdoctoral research experience in one of the following areas:

- (a) aspects of cellular and molecular physiology related to the regulation of cell growth and differentiation
- (b) mechanism of action of hormones and hormone antagonists
- (c) cancer cell biology

The appointee will be expected to develop an independent research programme in his/her own area of interest and be able to teach at undergraduate and postgraduate levels.

Gross annual emoluments range as follows:

Lecturer	S\$51,500- 65,620
Senior Lecturer	S\$59,970-106,030
Associate Professor	S\$93,700-129,870
(US\$1.00 = S\$1.60 approximately)	

The commencing salary will depend on the candidate's qualifications, experience and the level of appointment offered. In addition, appointees who possess an approved basic medical degree and a recognised higher academic/professional qualification may opt to retain consultation fees under the Consultation/Outside Work Scheme, or to receive a Fixed Allowance, the annual rates for which are as follows:

Lecturer	S\$6,000/9,000
Senior Lecturer	S\$15,000
Associate Professor	S\$21,000

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 or a housing allowance, education allowance for up to three children subject to a maximum of S\$16,425 per annum per child, passage assistance and baggage allowance for the transportation of personal effects to Singapore.

All academic staff have access to the following computer and telecommunication resources: a networked micro-computer (an IBM 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. The 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, Teleview, 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: **PERLIMMJ@NUS3090**, or through **Telefax: (65) 7783948**

## CNS DIAGNOSTICS RESEARCH

Hybritech Incorporated, a \$100 million subsidiary of Fortune 100 Eli Lilly and Company, is a recognized leader in the development of *in vitro* and *in vivo* products utilizing monoclonal antibody technology. We have an immediate and challenging opportunity for an outstanding expert in the area of CNS to head our CNS diagnostics research effort.

This individual will be responsible for the identification of new clinical and scientific opportunities in the area of Alzheimer's and other neurological diseases, make recommendations for business strategies, direct research projects and collaborations and formulate clinical trial strategies.

The successful candidate will have a Ph.D. or M.D. and education/training in biochemistry/molecular biology/neurochemistry with a strong focus in the area of Alzheimer's disease. A comprehensive understanding of the molecular basis of Alzheimer's and other neurological diseases is required. Some experience with technology transfer to product application and/or clinical trial strategy formulation, as well as prior interaction with biotech companies is desirable. Strong communication skills, the ability to work well with cross-functional teams and influence peers and upper management are essential.

Hybritech offers exceptional career opportunities, a stimulating environment, and competitive salaries and benefits. Please send your resume to: HYBRITECH INCORPORATED, Human Resources MD/SCI/9-17-93/CNS, P.O. Box 269006, San Diego, CA 92196-9006. We are committed to diversity in our workforce/EOE.



NYU  
Medical  
Center

## Assistant Research Scientist

NYU School of Medicine currently has a postdoctoral position available for an Assistant Research Scientist to study molecular mechanisms of antiviral action (HIV and other viruses) of plant proteins.

Requirements include a Ph.D. with experience in molecular/cellular biology, virology and immunology.

NYU Medical Center offers an excellent salary and benefits package, including four weeks paid vacation and free tuition at NYU. Please send your C.V. and names of three references to Maha Singh, Human Resources Dept., NYU Medical Center, 550 First Avenue, New York, NY 10016. Resumes must be received by Oct. 11. EOE, M/F.

**WHERE EXCELLENCE IS A WAY OF LIFE.**

## POSITION AVAILABLE SENIOR SCIENTIST Center for Nonlinear Studies (CNLS)

Researchers in the nonlinear science community are invited to apply for the position of Senior Scientist at the CNLS.

### Responsibilities:

- conducting a nonlinear science basic research program of the highest caliber;
- providing scientific guidance to postdocs, students, and visiting researchers;
- advising CNLS and Laboratory personnel on a broad spectrum of nonlinear research themes; and
- fostering collaborations in nonlinear science with academic and industrial research centers.

### Requirements:

- international stature and established track record of fundamental ground-breaking contributions in interdisciplinary nonlinear science required;
- experience in collaborative research with industry and ability to interact with broad range of theoretical, experimental, and computational researchers desirable;
- experience in leading internationally recognized scientific research programs desirable.

### Education:

- Ph.D. in the mathematical, physical, biological, computational, or engineering sciences.

Salary commensurate with experience and qualifications. Full benefits included.

For technical information, call Dr. Erica Jen at (505) 667-1444. To formally apply for this position, interested candidates should forward a resume and list of references to: James E. Trout (MS P282), Personnel Services Division 100863-F, Los Alamos National Laboratory, Los Alamos, NM 87545. Affirmative Action/Equal Opportunity Employer. Must be able to obtain a Department of Energy Security Clearance. Los Alamos National Laboratory is operated by the University of California for the U. S. Department of Energy.

**Los Alamos**  
NATIONAL LABORATORY

## OFFICE OF SPONSORED RESEARCH

The Worcester Foundation for Experimental Biology, a non-profit biomedical research institute 40 miles west of Boston, is seeking an individual to direct an Office of Sponsored Research. The primary objective of the office is to identify new project grant opportunities and to coordinate programmatic funding endeavors with federal agencies, notably NIH. This position requires an individual with an earned doctorate degree, postdoctoral training and ideally a period of independent research in one of the fields represented at the institution (cell biology, neurobiology and reproductive/developmental biology). Previous experience in an Office of Sponsored Research is essential, and the successful candidate must be thoroughly familiar with the federal biomedical research funding enterprise. Depending on the appointee's qualifications, the Office may also take on other aspects of research administration. Salary and benefits will be competitive.

Send detailed curriculum vitae and names of at least four references (with both telephone and FAX numbers) to: Office of Sponsored Research Position, c/o Human Resources Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, MA 01545. No phone inquiries.

An Equal Opportunity/Affirmative Action Employer



**Worcester Foundation for  
Experimental Biology**



## FACULTY AND POSTDOCTORAL POSITIONS

### CardioPulmonary Research Institute

Several Assistant Professor, or postdoctoral positions are available at the CardioPulmonary Research Institute (CPRI), a recently established facility of Winthrop-University Hospital, a major 581-bed teaching affiliate of the State University of New York at Stony Brook School of Medicine.

We seek investigators to study cellular and molecular mechanisms of tissue responses to oxidative injury, and induced tolerance to oxidative tissue injury. A background in eukaryotic gene expression and molecular biology is desired.

Candidates should submit a curriculum vitae and three letters of recommendation. Faculty candidates should also include a brief description of future research directions. Please send materials to: **Dr. Stuart Horowitz, CardioPulmonary Research Institute, Winthrop University Hospital, Suite 503, 222 Station Plaza North, Mineola, NY 11501.** An Equal Opportunity Employer M/F/D/V.

## Winthrop

WINTHROP-UNIVERSITY HOSPITAL  
A Major Teaching Affiliate of SUNY Stony Brook School of Medicine

### X-RAY CRYSTALLOGRAPHER FACULTY POSITION IN THE DEPARTMENT OF BIOCHEMISTRY McMASTER UNIVERSITY

McMaster University is seeking a highly qualified scientist at the assistant or associate professor level (tenure track). The appointee is expected to develop an outstanding research program and to promote cooperative scientific interactions as well as to participate in undergraduate and graduate teaching. McMaster currently has state of the art x-ray, NMR and electron microscope facilities and a number of scientists working in the area of biomacromolecular structure and function. In addition to structural biochemistry, other strengths are in gene expression, protein targeting, molecular virology, development and oncogenesis and inflammation.

Applicants should include a complete curriculum vitae, a summary of past and current research, a statement of future research plans and the names of at least three referees (complete with phone and fax numbers). These should be submitted by **October 15, 1993** to **Dr. Gerhard E. Gerber, Professor and Chair, Department of Biochemistry, McMaster Univ., 1200 Main St. W., Hamilton, Ontario L8N 3Z5. FAX 416-522-9033.** In accordance with Canadian immigration policy, this advertisement is directed to Canadian citizens or landed immigrants. Appointments subject to MRC approval.

## UNIVERSITY OF COLORADO AT BOULDER

### Molecular, Cellular & Developmental Biology

#### Department Chair

We seek an internationally recognized scientist of professorial rank with an excellent research program. We offer a **new building**, already under construction, and the opportunity to help **recruit 18 new faculty**, expanding our current group of 22. This is an extraordinary chance for someone interested in implementing a vision of the future for MCD Biology in an outstanding academic environment. Preference will be given to scientists studying **mammalian biology with molecular and cellular methods**. Appointment could begin 7/1/94. Please send CV and description of research plans to Charlotte Corbridge, University of Colorado, Boulder, CO 80309-0347. Dossiers considered upon receipt. Latest possible receipt: 12/31/93.

#### Faculty Positions

We seek four tenure-track faculty working on the biology of higher eucaryotes, particularly mammals. Preference will be given to candidates at the assistant professor level. Appointments could begin as early as August 1994. Successful candidates must have demonstrated outstanding research ability and teaching skills. Send résumés, representative reprints, an outline of future research directions, and three letters of recommendation to: **New Faculty Search, MCD Biology, University of Colorado, Boulder, CO 80309-0347.** Dossiers must be complete by 12/31/93, but earlier applications will be considered promptly.

*The University of Colorado is an equal opportunity/affirmative action employer.*

## SENIOR RESEARCH VIROLOGIST

We seek for a Senior Research Virologist with requirements that include Ph.D. with significant post-doctoral experience and accomplishments. Extensive experience with IN VITRO assays of infectious viruses, tissue culture and medical virology is required. Familiarity with PCR techniques is expected.

This position investigates detection and clearance of infectious model viruses from biological processes via infectivity as well as sensitive PCR techniques so that end product is suitable for human therapeutic use.

Join a growing company with competitive salary and benefits package.

Qualified applicants please send resume to: **J. McHugh, Human Resources, P.O. Box 1986, Berkeley, CA 94701.**

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

## MILES

Pharmaceutical Division  
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## POSITIONS OPEN

### LYLE C. DICKMAN ENDOWED CHAIR FOR PLANT IMPROVEMENT UNIVERSITY OF FLORIDA

The University of Florida is seeking an experienced scientist who will conduct an innovative program in the area of plant genetics. The candidate must be internationally recognized in plant genetics, and must have a demonstrated ability to obtain external funds and to attract and work with outstanding graduate and postdoctoral students. Research results will be useful, in the long term, to tomato genetics. It is anticipated that the successful candidate will interact with others at the University of Florida with interests in plant molecular biology/genetics as well as those engaged in plant breeding. Persons with skills, experience and a track record in modern molecular or cellular genetics are especially encouraged to apply. Letters of nomination should be submitted by October 1, 1993, to: **Dr. Daniel J. Cantliffe, Dickman Chair Search Committee, Horticultural Sciences Department, University of Florida, Gainesville, FL 32611-0690.** Applications including a résumé and names of five referees will be accepted until November 1, 1993. *The University of Florida is an Equal Opportunity/Affirmative Action Employer.*

### VICE CHAIR FOR CLINICAL PATHOLOGY, Oregon Health Sciences University

The Department of Pathology at Oregon Health Sciences University invites applications for the position of Vice Chair for Clinical Pathology, a tenured or tenure-track position. This individual, who will be the academic head of the Division of Clinical Pathology, should be an established investigator who, by direction and example, will promote the research and teaching activities of the Division and Department. He/she will supervise the Medical Director of the Clinical Laboratories, a newly created position. Applicants should be certified in Clinical Pathology by the American Board of Pathology and should have experience as a section or division chief in an academic clinical laboratory. He/she should be qualified to assume the rank of Associate Professor or Professor of Pathology. Apply with curriculum vitae and bibliography to: **Donald C. Houghton, M.D., Chair, Department of Pathology, L113, Oregon Health Sciences University, 3181 SW Sam Jackson Park Road, Portland, OR 97201.** *Oregon Health Sciences University is an Equal Opportunity/Affirmative Action Employer.*

### MOLECULAR PATHOGENESIS AND IMMUNOLOGY JUNIOR AND SENIOR FACULTY POSITIONS AVAILABLE

The Department of Microbiology and Immunology invites applications for junior- and senior-level, tenure-track positions focusing on the molecular analysis of significant problems in bacterial pathogenesis and immunology. Senior candidates should have strong records of research accomplishment with sustained program growth and development. Junior candidates will be expected to develop high-quality, independent research programs with long-term growth potential. Teaching responsibilities, which emphasize quality rather than quantity, include medical, dental and graduate students. The Department offers a high-quality intellectual environment with 80% of the faculty holding active extramural research grants.

A large Center of Excellence grant has resulted in establishment of a Molecular Resource Center within the Department featuring state-of-the-art facilities for: oligonucleotide synthesis, peptide synthesis, monoclonal antibody production, amino acid analysis, DNA sequencing, molecular graphics, and flow cytometry. Funds for the initiation of research programs will be available and salaries will be highly competitive.

Review of applications will continue until the position is filled. Applications should consist of curriculum vitae, copies of several recent publications, a brief statement of future research goals and three letters of reference to be sent to:

**Dr. Terrance G. Cooper**  
Department of Microbiology and Immunology  
The University of Tennessee, Memphis  
858 Madison Avenue, Room 801  
Memphis, TN 38163

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

## POSITIONS OPEN

### DIRECTOR OF ENVIRONMENTAL HEALTH AND SAFETY WAYNE STATE UNIVERSITY

Wayne State University is seeking a permanent, full-time director for its division of environmental health and safety, effective immediately. Advanced degree applicants will be given preference. The director reports to the office of the Vice President for Research. This division is responsible for the university's biosafety plan, chemical hygiene plan, right-to-know information, and the processing and disposal of hazardous and biohazardous wastes. Applications, together with current curriculum vitae and names and addresses of three references, should be forwarded by November 1, 1993, to:

Wayne State University  
Employment Services (Posting #14)  
263 Administrative Services Building  
Detroit, MI 48202

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

### UCSF SCHOOL OF MEDICINE TENURE-TRACK FACULTY POSITION IN THE PROGRAM OF BIOLOGICAL SCIENCES

The Department of Orthopaedic Surgery and the Program in Biological Sciences of the School of Medicine, University of California, San Francisco, seek a molecular cell and/or developmental biologist whose primary interest is in the organization and function of bone and cartilage as tissues. The candidate for this position must have a demonstrated expertise in connective tissue research at the cellular and molecular level with particular interest in bone or cartilage biology, should be able to develop an active and independently funded research program and teach professional and graduate students.

Please submit a letter of application, curriculum vitae and bibliography, narrative description of plans for future research, and the names, addresses and telephone numbers of three references. Deadline for all material: November 1, 1993. To: **David S. Bradford, M.D., Professor and Chairman, Department of Orthopaedic Surgery, or Dr. Donald E. Ganem, Professor of Microbiology and Immunology, Search Committee, Room U 471, University of California Medical Center, San Francisco, CA 94143-0728.**

*(UCSF is an Equal Opportunity Employer.)*

### TENURE-TRACK POSITION IN X-RAY CRYSTALLOGRAPHY

The School of Biological Sciences at the University of Missouri-Kansas City (UMKC) announces a program of expansion of the structural biology component in its Cell Biology and Biophysics Division. The development of a macromolecular biological structure X-ray facility is the first element of this development. The School welcomes applications for a tenure-track faculty position from individuals with at least 3 years of postdoctoral research experience in the field of X-ray crystallography. Applications from accomplished researchers with teaching experience are preferred. Start-up funds, equipment, renovated laboratory facility and technical assistance available.

The successful applicant is expected to have, or be able to develop, an independent, active research program supported by extramural funding. Responsibilities will include supervision of the X-ray laboratory and at least one research scientist in a non-tenure-track faculty position. Good supervisory and teaching skills are necessary.

Teaching activities will involve participating in the doctoral programs of the School and in modern biological sciences undergraduate and health sciences curricula. Candidates should arrange for three letters of referral and send curriculum vitae and brief summary of professional accomplishment and future research goals. Screening of candidates will begin November 5, 1993, and will remain open until suitable candidates are found. Contact: **Crystallography Search Committee c/o Vicki Hagan, School of Biological Sciences, University of Missouri, Kansas City, MO 64110.** *UMKC is an Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### DIRECTOR, ENVIRONMENTAL EPIDEMIOLOGY AND OCCUPATIONAL HEALTH

The Connecticut Department of Public Health and Addiction Services is seeking an environmental health scientist with administrative experience, to lead a staff of 20 in the Environmental Epidemiology and Occupational Health (EEOH) unit. The EEOH unit works with local, state, and federal agencies, and the public in assessing environmental health risks and includes program areas of occupational health, health assessment, and radon. Applicants must be skilled in epidemiology, toxicology, statistics, assessing risks and communicating with the public. Affiliation with major universities and medical centers can be arranged. Salary range is \$56,217 to \$79,610. This is a competitive civil service position.

Requires two years of experience in a supervisory, administrative or consultative capacity in epidemiology, toxicology or environmental engineering.

For an application call:

**Richard Andisio**  
Department of Administrative Services  
Personnel Division  
Telephone: 203-566-3993

*An Affirmative Action and Equal Opportunity Employer.*

### MCGILL UNIVERSITY DEPARTMENT OF PHARMACOLOGY & THERAPEUTICS FACULTY LECTURER/ RESEARCH ASSISTANT

Applications are invited for a non-tenure-track position in the area of male reproductive pharmacology. Candidates must have a Ph.D. or equivalent and at least 2 years of postdoctoral experience. Knowledge of molecular biology methods and endocrine systems is desirable. Salary will be in accordance with experience and expertise. Applications, including curriculum vitae, selected reprints, and names, addresses and telephone numbers of three referees should be sent to: **Dr. B. Robaire, Department of Pharmacology and Therapeutics, McGill University, 3655 Drummond, Montreal, Quebec, Canada, H3Y 1Y6** by November 15, 1993. *In accordance with Canadian immigration requirements, this advertisement is directed toward Canadian citizens and permanent residents of Canada. McGill University is committed to Equity in Employment.*

### FACULTY POSITION UNIVERSITY OF VERMONT NMR SPECTROSCOPIST

The Department of Biochemistry of the University of Vermont College of Medicine has available a full-time (12-month appointment) tenure-track position. We are seeking an NMR spectroscopist with demonstrated expertise in structural biology, for example, in the characterization of macromolecules. There are identified funds available for the purchase of a high field NMR spectrometer with 2-D and multinuclear capabilities. The individual selected will be expected to maintain an externally funded, independent research program, to participate in the teaching programs of the Department, and to assume appropriate administrative obligations. We anticipate that the appointee will assume a leadership role in the development of a central facility for studies in the area of structural biology. Rank and salary are negotiable and commensurate with experience and accomplishments. Please send a résumé, including a description of research interests, career goals, present and past research support, and the names of three references to: **Chair, Search Committee, Department of Biochemistry, Given Building, University of Vermont, College of Medicine, Burlington, VT 05405-0068.** *The University of Vermont is an Equal Opportunity/Affirmative Action Employer. Women and people from diverse racial, ethnic and cultural backgrounds are encouraged to apply. Applications will be accepted until the position is filled.*

**POSTDOCTORAL POSITION** available to work on the effect of adenovirus E1A proteins on the transcriptional regulation of metastasis-related cellular genes. Send curriculum vitae and names of three references to: **Dr. Bayar Thimmapaya, Lurie Cancer Center, 8510 Olson, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611.** FAX: 312-908-1372.



## POSITIONS OPEN

The Radiology Department at the University of Pennsylvania invites applications for a **FACULTY POSITION**, level to be determined by qualifications, for an individual to develop spectral editing and multiple quantum imaging techniques for *in vivo* MRS and MRI, train graduate students, assist in teaching graduate-level MR, participate in MR research projects and aid in the development of a digital MR spectrometer. Ph.D. in Chemistry and four years of postdoctoral experience in *in vivo* MR required. Expertise in the following areas desired: NMR, NQR, building rf coils for *in vivo* studies, operating and maintaining MR spectrometers and teaching. Interested candidates should send curriculum vitae, three letters of reference and reprints to: **Prof. J. S. Leigh; Basement, Blockley Hall; Philadelphia, PA 19104-6021.** The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer. Minority and women candidates are encouraged to apply.

**MOLECULAR BIOLOGY/PHYSIOLOGY:** Tenure-track position at Judson College, a Baptist college for women since 1838. Successful applicant will teach chemistry-based courses such as cell biology, physiology, immunology, genetics, biochemistry and possibly microbiology. The candidate is expected to engage in academic and career counselling of biology majors. Biology program is strongly oriented toward the health professions and environmental sciences. Send curriculum vitae and names of references to: **Dr. George C. Williams, Chairman, Science Division, Judson College, Bibb Street, Marion, AL 36756.** Telephone: 205-683-5178. Judson College is an Equal Opportunity/Affirmative Action Employer.

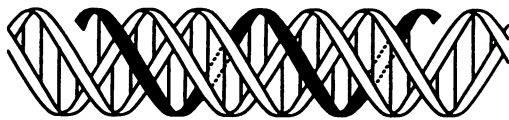
**POSTDOCTORAL POSITION** available to study expression of antibodies in plants. A Ph.D. in a related area with expertise in plant tissue culture, transformation, and protein expression assays essential. For full consideration curriculum vitae, transcripts, statement of research interests and three letters of reference should arrive by 1 October 1993 to: **John L. Sherwood, Plant Pathology Department, Oklahoma State University, Stillwater, OK 74078.** Oklahoma State University is an Equal Opportunity Employer.

**POSTDOCTORAL POSITION** available to study the mechanism and regulation of intracellular transport catalyzed by the microtubule-based motors cytoplasmic dynein and kinesin. Projects involve the cellular, molecular, and biochemical analysis of the motor proteins and their regulatory factors. Send curriculum vitae and a description of research interests to: **Erika Holzbaur, Ph.D., University of Pennsylvania, 143 Rosenthal Building, 3800 Spruce Street, Philadelphia, PA 19104-6046.**

**POSTDOCTORAL POSITIONS, DEPARTMENT OF BOTANY, DUKE UNIVERSITY.** Two positions available immediately. (1) Individual to contribute to understanding of functional components of growth in trees as affected by elevated CO<sub>2</sub> and climate change. Candidates with skills and interest in developing/refining existing process models of plant growth and in the experimental analysis of pine growth are encouraged to apply. (2) Individual with skills and training in ecological and computer modeling of plant and ecosystem response to elevated CO<sub>2</sub> and climate change. Joint positions with experimental group of Boyd R. Strain and modeling group of James F. Reynolds. Starting salaries: \$25,000 per year with full benefits. Closing date: October 15, 1993. Send curriculum vitae, statement of research interests, and names and addresses of three references to: **Dr. Richard Thomas, Department of Botany, Phytotron Building, Duke University, Box 90340, Durham, NC 27708-0340.** Duke University is an Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION.** Neuroscience. 1 to 3 years beginning immediately to study regulation of pelvic visceral tissues following injury of the autonomic nervous system. Refer questions to: **Dr. William G. Dail, Department of Anatomy, 505-277-5555.** Send curriculum vitae accompanied by a cover letter with an original signature and two references to: **University of New Mexico Medical Center Human Resources, Medical Building 2, Room 101, Albuquerque, New Mexico 87131-5023.** Refer to Requisition #912. Application deadline October 1, 1993. Equal Opportunity/Affirmative Action Employer.

# Triplex



Triplex Pharmaceutical Corporation, a rapidly growing, well financed, biotechnology company focused on the design and commercial development of triple helix forming therapeutics for human use, has three immediate employment opportunities available. These three positions are for an Associate Director of Pharmacology, Post-Doctoral Fellowship and a Research Scientist.

### ASSOCIATE DIRECTOR OF PHARMACOLOGY:

The successful candidate for this position will take responsibility for the development of in-house animal models of disease including tumor growth and cardiovascular disease, and the conduct of preliminary pharmacokinetics and toxicology experiments. Other duties will be to identify potential new targets and the necessary collaborators to perform relevant outside studies. Candidates should hold a Ph.D. in Pharmacology or Physiology and have 6-8 years of relevant hands-on experience, preferably in the pharmaceutical industry. The ability to work successfully in a fast-paced, multi-disciplinary environment is essential.

### POST-DOCTORAL FELLOWSHIP & RESEARCH SCIENTIST:

Our Anti-Cancer Program has two immediate openings for a Post-Doctoral Fellow and a Research Scientist. Both persons will focus on the analysis of transcriptional control for genes important in the development of human cancers and will investigate the use of single-stranded oligonucleotides to repress expression of oncogenes. **Post-Doctoral Fellowship:** The qualified applicant should have recently received a Ph.D. in molecular biology, cell biology or a related field and have 0-4 years postdoctoral experience. Research experience should be in control of transcription in eucaryotic systems. **Research Scientist:** We are seeking a scientist with 3-6 years post-doctoral experience in eucaryotic transcription, steroid hormone biology and developmental biology of cancer.

Triplex is located in an attractive community north of Houston offering access to research centers such as Baylor College of Medicine, Texas Medical Center, Rice University, Texas A&M and the University of Houston. We offer competitive salaries and benefits as well as opportunities for publication and rapid career growth in an exciting research program. Qualified applicants are encouraged to submit full resumes with references to:

Human Resources Manager  
Triplex Pharmaceutical Corporation  
9391 Grogan's Mill Road  
The Woodlands, TX 77380  
Facsimile: 713/363-1168

### ASSISTANT/ASSOCIATE PROFESSOR:

The Department of Anatomy and Cell Biology in the Faculty of Medicine at the University of Alberta invites applications for up to two positions as Assistant/Associate Professor to investigate modern biological questions using cellular/molecular approaches. Salary range: \$40,035-\$71,725 p/a, plus comprehensive benefits. Applicants should have proven records of research achievement and will be eligible for funding by the Alberta Heritage Foundation for Medical Research. Successful candidates will be expected to carry on independent research programs, but will also have the opportunity for collaborative interactions with several multidisciplinary research groups within the University. A contribution to the department's teaching program will also be expected.

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

Please send a curriculum vitae, statement of research interests, and ask three to five referees to send letters to: **Dr. Richard Rachubinski, Professor and Chair, Anatomy and Cell Biology, University of Alberta, Edmonton, Alberta, Canada, T6G 2H7.** Deadline for receipt of applications is December 31, 1993.

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

### HARVARD SCHOOL OF PUBLIC HEALTH FACULTY POSITION IN INDUSTRIAL HYGIENE/AEROSOL SCIENCE

Harvard School of Public Health is searching for an **Associate Professor** or **Assistant Professor** in the field of **Industrial hygiene with specialization in aerosol science.** The applicant should have a doctoral degree and be carrying out research in such areas as: evaluation of industrial aerosol hazards, aerosol physics, inhalation toxicology of aerosols, chemical characterization of aerosols, and engineering studies of aerosol behavior or control technology. Evidence of research interest and teaching in industrial hygiene is required. Experience in professional practice and American Board of Industrial Hygiene certification are highly desirable. Aerosol researchers willing to make the commitment to the field of industrial hygiene are welcome to apply. Responsibilities will include teaching industrial hygiene and participation in multidisciplinary research related to workplace health and safety. Applications from women and members of minority groups are especially encouraged. A letter of interest and a curriculum vitae should be sent to **Chair, Industrial Hygiene Search Committee, Department of Environmental Health, Harvard School of Public Health, 665 Huntington Avenue, Boston, MA 02115.**



National Institute of Neurological Disorders and Stroke  
National Institutes of Health • Public Health Service  
Department of Health and Human Services

**Position: Director, NINDS**  
**Location: Bethesda, Maryland**

The National Institute of Neurological Disorders and Stroke (NINDS) invites nominations and applications for the position of Director, NINDS. This is a Civil Service Position in the Senior Executive Service with a salary range of \$92,900 to \$115,700 per year. Physicians may be eligible for a Physician's Comparability Allowance up to \$20,000 per year. A one-year probationary period must be served by the individual selected if not currently in the Senior Executive Service.

The National Institute of Neurological Disorders and Stroke conducts, fosters, and supports research and research training on the causes, prevention, diagnosis, and treatment of neurological disorders. The Institute's program includes basic and clinical extramural and intramural neurological research and training programs for scientists interested in research careers in the biomedical sciences with a special interest in fundamental neurological disorders, stroke and central nervous system trauma.

Applicants must possess a strong background and accomplishments in the development, management and direction of biomedical research programs.

For information regarding qualifications requirements, contact Mr. Alfred L. Salas at (301) 496-6334. The following forms are required: Application for Federal Employment (SF-171), available at all Federal Job Information Centers, accompanied by a current curriculum vitae and bibliography. These must be submitted to: **Mr. Alfred L. Salas, National Institutes of Health, NINDS Personnel Office, Building 31, Room 8A23, 9000 Rockville Pike, Bethesda, Maryland 20892.**

*Applications must be submitted by October 15, 1993.*

Public Health Service Commissioned Officers interested in performing the duties of the position within the Commissioned Corps may submit a resume to the above address.

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

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**MOLECULAR BIOLOGIST**  
**DEPARTMENT OF**  
**NEUROBIOLOGY & BEHAVIOR**  
**THE UNIVERSITY AT STONY BROOK**

The Department is seeking faculty candidates, either at the assistant, associate or professor levels, for the 1994/95 academic year. These are state-funded, tenured or tenure-track positions that are dedicated to the continuing growth in molecular neurobiology in the Department. The successful candidates will complement a growing group of molecular neurobiologists with interests in gene expression, signal transduction, and developmental neurobiology. The Department currently consists of 23 members, with active research programs in a broad range of areas within neuroscience.

Applicants should have a minimum of two years of postdoctoral experience. The successful candidates will be expected to develop a vigorous, independent research program and will participate in undergraduate and graduate teaching within the Division of Biological Sciences. Generous space and start-up funds will be provided. Applicants should submit a curriculum vitae, a statement of research interests, and the names and addresses of at least 3 references to: Faculty Search Committee, Department of Neurobiology & Behavior, State University of New York, Stony Brook, NY 11794-5230. The closing date for applications is December 1, 1993.

An affirmative action/EEO employer.

1466-SCIENCE



**STONY BROOK**



**PENN**  
UNIVERSITY OF PENNSYLVANIA

**The Department of Neuroscience** at the University of Pennsylvania School of Medicine has openings for two tenure-track appointments at the assistant professor level. For one, we seek a scientist working in mammalian systems neurobiology; preference will be given to individuals working in the visual system to complement our strong representation in this area. The second will be filled by an individual whose work applies molecular techniques to problems of neural development. Applicants should submit letters describing their research interests, CVs, and three letters of recommendation to: **Faculty Search Committee, Department of Neuroscience, 218 Stemmler Hall, University of Pennsylvania School of Medicine, Philadelphia, PA 19104.** Closing date for receipt of applications is December 15, 1993. Penn is an AA/EOE. Women & minorities are encouraged to apply.

**PROFESSOR OR  
ASSISTANT PROFESSOR**

The Section of Cell Growth, Regulation and Oncogenesis, Duke Comprehensive Cancer Center, Duke University Medical Center, invites applications for positions at the level of either Professor or Assistant Professor. Research within the Section is focused on the genes and biochemical pathways that regulate cell growth and the molecular analysis of the disruption of such controls in cancer cells. Investigators working at the molecular level on signal transduction, oncogenes/anti-oncogenes, angiogenesis, metastasis and apoptosis are especially encouraged to apply. Applicants seeking a tenured professorship must have distinguished records of accomplishments and be internationally recognized as a leader and innovator in research. Applicants seeking a tenure-track assistant professorship must have a doctoral, at least 2 years of postdoctoral training and must have demonstrated high potential for imaginative independent research. Successful candidates will also be appointed into a basic science department within the Medical Center. Applicants for a tenured professorship position need send only a letter expressing interest, curriculum vitae and list of publications. All inquiries will be held in confidence. Applicants for an assistant professorship should send curriculum vitae, a brief description of present and proposed research and arrange for three or more letters of recommendations to be forwarded to: **Dr. Robert M. Bell, Head, Section of Cell Growth, Regulation and Oncogenesis, Duke Comprehensive Cancer Center, Box 3686, Durham, NC 27710.** To be assured of full consideration, the application should be received by November 8, 1993.

**Duke University  
Medical Center**

Duke University is an Equal Opportunity/Affirmative Action Employer.



**Washington**

WASHINGTON UNIVERSITY IN ST. LOUIS

**Biology & Biomedical Sciences**

*Graduate and postdoctoral training  
opportunities in...*

**Systems Neuroscience**

- Harold Burton** - Neurophysiological, behavioral and PET studies of somatosensory cortex; tactile discrimination, attention and memory.
- Andreas Burkhalter** - Organization and synaptic physiology of adult and developing circuits in visual cortex of mammals.
- Steve Hightstein** - Response dynamics of vestibular semicircular canals and central vestibular function, including motor learning.
- Arthur Loewy** - Use of viruses to study CNS pathways that regulate autonomic functions.
- Steve Petersen** - Language, attention, and vision studies utilizing PET and behavioral techniques.
- Joseph Price** - Analysis of frontal cortex/limbic forebrain; Alzheimer's Disease.
- Marc Schieber** - Motor control of finger movement.
- Paul S.G. Stein** - Somatosensory and motor integration in spinal cord; scratch reflex in turtle; central pattern generators.
- Nobuo Suga** - Neurophysiological basis of bisonar and acoustic communication in bats.
- Thomas Thach** - Macaque monkey nervous system; Mechanisms of movement control in macaque monkeys and man.
- David Van Essen** - Primate visual system information processing; organization and function of visual cortex in the macaque monkey; analyses of specific visual functions.
- Rachel O.L. Wong** - Role of activity and of neurotransmitters in the early development of the retina.
- Thomas Woolsey** - Structure, function and development of the central nervous system and the relation of blood supply to these properties.

*... and others*

*Please direct inquiries for postdoctoral training to specific faculty members. For graduate school information, please write to: Biology & Biomedical Sciences, Campus Box 8226, 660 S. Euclid Ave., St. Louis, MO 63110-1093; or call 800-852-9074.*



## TARGETED GENETICS CORPORATION

### *A Gene Therapy Company*

**Targeted Genetics Corporation** is a biopharmaceutical company developing integrated gene therapy systems for the treatment of acquired and inherited diseases. Our efforts are focused on reconstitution of immunity to infectious disease by *ex vivo* genetic modification and adoptive transfer of cytotoxic T cells. We are extending this work to the treatment of cancer and also expanding our programs to develop adeno-associated virus (AAV) based vectors for both *in vivo* and *ex vivo* gene therapy. Continued growth has created opportunities for scientists in the following areas:

### GENE EXPRESSION

Two positions are available for candidates with several years of post-doctoral experience in mammalian gene expression. Areas of focus include:

- Develop expression vectors for use in adoptive immunotherapy of malignancies using genetically modified tumor-specific CTL. (Ref SL9/93).
- Analyze AAV regulatory mechanisms and develop regulatable expression systems for production of recombinant AAV particles. (Ref GE9/93).

### GENE TRANSFER

- Study the molecular virology of AAV vectors and helper functions to improve transduction of specific target cells. Several years' post-doctoral experience in molecular virology preferred. (Ref RO9/93).

### DEVELOPMENT

- Develop processes for the scale-up, purification, and concentration of retroviral and AAV vector particles. The ideal candidate has 2-5 years' post-doctoral industry experience with a background in viral vectors or gene transfer. (Ref TR9/93).

The successful candidates will join a highly interactive group dedicated to the aggressive pursuit of research programs leading to therapeutic products. Targeted Genetics Corporation offers competitive salaries and an excellent benefits package. For consideration, please submit C.V. with the appropriate job number and the names of three references to:

**Targeted Genetics Corporation**  
Human Resources Department  
1100 Olive Way, Suite 100  
Seattle, WA 98101

Equal Opportunity Employer



*Our entrepreneurial environment naturally evolves as a function of our mission: the development of recombinant DNA-based human therapeutics, utilizing the principles of cellular and molecular biology...through rapid product development and innovative commercialization strategies. We currently have opportunities for the following professionals:*

### Research Associates

Candidates must have a BS/MS degree in Chemistry or Biochemistry with experience in carbohydrate and glycoprotein chemistry. HPLC and chromatography experience is desirable. **(Job Code OA-SC-SS-003)**

### Analytical Biochemist

Candidate will work in our Fermentation Process Development Group. Your primary focus will be working with our Process Development Scientists to analyze the effect of different process conditions on product quality and yield. Candidate must have a Ph.D. in Biochemistry or Protein Chemistry and 1-2 years postdoctoral experience. Familiarity with protein purification, HPLC, and fine structure analysis of proteins a must. Your strong interactive skills will be an asset when working with a variety of groups at Amgen, including Analytical Resources, Protein Chemistry, Protein Structure, and Recovery Process Development. **(Job Code OA-SC-NB-004)**

At Amgen, our staff plays an integral role in maintaining the highest of standards and product excellence. We offer a competitive salary and benefits package that include a savings and retirement plan, three weeks vacation, an educational reimbursement program, and on-site child care and fitness centers. If you're interested in this position, please FAX/mail your resume to: **FAX: (805) 447-1985, Amgen Inc., Staffing, Job Code (See Above), Amgen Center, Thousand Oaks, CA 91320-1789.**

# AMGEN®

We are an equal opportunity employer M/F/D/V.

## POSITIONS OPEN

### POSTDOCTORAL STUDY IN CANCER GENETICS

#### UNIVERSITY OF WISCONSIN-MADISON

Postdoctoral position available to study genetics of pancreatic, hepatic, and mammary cancers using transgenic mouse models. Please submit curriculum vitae, statement of research interests, and names of 3 references to: **Dr. Eric P. Sandgren, School of Veterinary Medicine, University of Wisconsin-Madison, Madison, WI 53706. FAX: 608-263-6573. Equal Opportunity/Affirmative Action Employer.**



**GENELABS  
TECHNOLOGIES, INC.**

### POSTDOCTORAL POSITION

Postdoctoral candidates are sought for our exciting Human Genome program. The postdoctoral research project will focus on transcriptional mapping of the cytokine gene cluster on 5q23-31 using current molecular biology techniques. Candidates should have ample experience in molecular and/or cell biology; be familiar with PCR analysis, cDNA and genomic libraries construction; and have experience in clone analysis by hybridization, sequencing and computing. cDNA expression experience would be a plus. Interested candidates should forward curriculum vitae to: **Genelabs Technologies, Inc., 505 Penobscot Drive, Redwood City, CA 94063 or FAX to (415) 368-0709. Equal Opportunity Employer.**

**POSTDOCTORAL POSITION** available immediately in a multidisciplinary program to study the molecular and cellular biology of the Inositol 1,4,5-trisphosphate receptor family. Experience in molecular biology and biochemical methodologies is preferred. Mail or FAX curriculum vitae, and the names of three references to: **Dr. Gregory A. Mignery, Department of Physiology, Loyola University Medical Center, 2160 South First Avenue, Maywood, IL 60153; FAX: (708) 216-6308. An Affirmative Action/Equal Opportunity Employer.**

### POSTDOCTORAL POSITION

A postdoctoral position is available to investigate the role that alterations in the methylation status of DNA might play in the aberrant expression of protooncogenes that are involved in carcinogenesis. We employ mouse liver tumorigenesis as our model system. I am seeking an enthusiastic individual who possesses a doctorate degree in one of the biomedical sciences, good communication skills and the capability of applying biochemical and molecular biological techniques to the research problem at hand. Interested individuals should send curriculum vitae, a letter of application containing a brief description of their research experience, and the names, addresses and telephone numbers of three references to: **Dr. Jay I. Goodman, Department of Pharmacology and Toxicology, Michigan State University, B-440 Life Sciences Building, East Lansing, MI 48824.**

*Michigan State University is an Affirmative Action/Equal Opportunity Institution.*

**POSTDOCTORAL POSITION** available with USDA to study the molecular biology and genetics of blister rust disease in eastern white pine. Candidates must have a Ph.D. and research experience in plant pathology and molecular biology. *U.S. citizenship is required.* Send résumé, publications, and names of three references to: **Dr. Charles Michler or Dr. Craig Echt, USDA Forest Service, POB 898, Rhinelander, WI 54501. Telephone: (715) 362-1112. An Equal Opportunity Employer.**

**POSTDOCTORAL POSITIONS** are available to study the control mechanisms of gene expression and signal transduction of two human cytokines, interleukin (IL)-9 and IL-11. Candidates with background in molecular biology or biochemistry, interested in understanding the role of these growth factors, should send curriculum vitae and addresses of three references to: **Dr. Yu-Chung Yang, Departments of Medicine (Hematology/Oncology) and Biochemistry/Molecular Biology, Walther Oncology Center, Indiana University School of Medicine, IB540, 975 West Walnut Street, Indianapolis, IN 46202. Telephone: (317) 274-7512; FAX: (317) 274-7592.**

## POSITIONS OPEN

**POSTDOCTORAL POSITIONS** in Molecular Cardipulmonary Pharmacology available for recent Ph.D. in pharmacology, physiology or biochemistry. Project related to molecular pharmacology of purine receptors and the involvement of second messenger systems in smooth muscle, epithelial and endothelial cells. Salary NIH level. Experience in related field preferred. Send curriculum vitae and 3 letters of recommendation by September 30, 1993, to: **Dr. S. Jamal Mustafa, Department of Pharmacology, East Carolina University, Greenville, NC 27858. Federal law requires proper documentation of identity and employability at the time of employment. Affirmative Action/Equal Employment Opportunity.**

### POSTDOCTORAL INVESTIGATOR EMBRYOLOGY

The Biology Division of the Oak Ridge National Laboratory (ORNL), managed by Martin Marietta Energy Systems, Inc., for the U.S. Department of Energy, is seeking a postdoctoral investigator to study altered gene expression in early mouse development. The preferred candidate has training in mammalian embryology, but nonmammalian embryologists are encouraged to apply. Expect to interact with geneticists and molecular biologists in the Mammalian Genetics and Development Section.

Send curriculum vitae and three letters of reference to: **W.M. Generoso, Biology Division, Oak Ridge National Laboratory, P.O. Box 2009, Oak Ridge, TN 37831-8077. ORNL is an Equal Opportunity Employer committed to building and maintaining a diverse workforce.**

**POSTDOCTORAL POSITION** available to investigate mechanical, biochemical, and physiological aspects of smooth muscle contraction. Studies include isolated contractile proteins, detergent and alpha-toxin permeabilized fibers, and intact tissues to examine  $Ca^{2+}$  dependent regulation of contraction and G-protein dependent signal transduction pathways. Experience in muscle research desirable but not necessary. Please send curriculum vitae and names, addresses, and telephone numbers of three references to: **Dr. Robert S. Moreland, Bockus Research Institute, Graduate Hospital, 415 South 19th Street, Philadelphia, PA 19146.**

**POSTDOCTORAL CHEMIST** to conduct multidisciplinary research in the development of new radiopharmaceuticals for PET and SPECT imaging. Job requires a Ph.D. degree in organic or medicinal chemistry, strong background in synthesis; working knowledge of pharmacology and experience in radioisotope handling helpful but not necessary. Excellent opportunity for chemists to apply synthetic techniques to the *in vivo* diagnostic imaging field. Please send résumé and curriculum vitae to: **Dr. Hank F. Kung, Departments of Radiology and Pharmacology, University of Pennsylvania, Room 305, 3700 Market Street, Philadelphia, PA 19104. Equal Opportunity Employer/Affirmative Action/M/F/D/V.**

### NEUROVIROLOGY-MOLECULAR BIOLOGY FELLOWSHIPS

The University of Colorado invites applications for postdoctoral fellowships in Neurology-Molecular Biology. Fellowships are NIH-supported under the aegis of 14 mentors with expertise in clinical, molecular, and immunologic aspects of neurotropic virus infection and neurodegenerative diseases. Send curriculum vitae and three references to: **Dr. Donald H. Gilden, Professor and Chairman, Department of Neurology, Box B182, 4200 East Ninth Avenue, Denver, CO 80262. The University of Colorado Health Sciences Center is committed to Equal Employment Opportunity and Affirmative Action.**

A position at the rank of **POSTDOCTORAL FELLOW** or **RESEARCH ASSISTANT PROFESSOR** (non-tenure-track) is available to investigate the regulation of O-glycosylation. The successful candidate will have strong skills in either eukaryotic molecular biology or the characterization of glycoproteins. Salary is competitive and commensurate with experience. Send curriculum vitae and the names of two referees to: **Dr. Lawrence A. Tabak, University of Rochester Medical Center, Box 611, Rochester, NY 14642; FAX: 716-473-2679.**

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

## POSITIONS OPEN

**POSTDOCTORAL/RESEARCH ASSOCIATE POSITION** available immediately in behavioral pharmacology in the Department of Pharmacology at the Northeastern Ohio Universities College of Medicine. The position involves research on drugs of abuse with current emphasis on stimulants, ethanol and nicotine. Duties include conducting experiments, supervising technical staff and writing manuscripts. A background in the experimental analysis of behavior and/or neurochemical analysis would be preferred. The Medical school is housed in a modern facility on 55 acres and is in close proximity to a wide variety of living styles. Send curriculum vitae and names and addresses of references by 22 October 1993 to: **Martin D. Schechter, Ph.D., Professor and Chairman, Department of Pharmacology, Northeastern Ohio Universities College of Medicine, 4209 S.R. 44, P.O. Box 95, Rootstown, OH 44272-0095. Equal Opportunity/Affirmative Action Employer.**

### POSTDOCTORAL FELLOW

Position available to study the molecular genetics of insulin-dependent diabetes mellitus. The research will involve detailed analysis of human chromosome 6 in the HLA region which is involved in Type I diabetes, as well as analysis of other candidate genes in both unrelated diabetics and multiplex families. The candidate should have experience in molecular biology including polymerase chain reaction, Southern blot analysis, cloning, and sequencing. Send curriculum vitae, statement of research interests, and the names of three references to: **Marie L. Hoover, Ph.D., Coriell Institute for Medical Research, 401 Haddon Avenue, Camden, NJ 08103. Affirmative Action/Equal Opportunity Employer.**

**CLINICAL AND GERIATRIC PHARMACOLOGY FELLOWSHIPS.** Applications from Board-eligible/Board-certified physicians are solicited for a position starting September 1, 1993, in the Brown University Department of Medicine. Specific projects include mechanisms of cytoskeletal protein gene regulation in vascular smooth muscle, age-related effects on angiotensin II and endothelin-1 responses and age-related *in vivo* human arterial responsiveness. In addition to M.D. and M.D./Ph.D. applicants, highly qualified Ph.D. applicants will be considered. Competitive salary in an outstanding environment. For further information contact: **Darrell R. Abernethy, M.D., Ph.D., Director, Division of Clinical Pharmacology, Brown University School of Medicine, Department of Medicine, Rhode Island Hospital (SWP-404), 593 Eddy Street, Providence, RI 02903.**

### ASSISTANT RESEARCH ASTROPHYSICIST

**Center for Particle Astrophysics  
University of California at Berkeley**

The Center for Particle Astrophysics, an NSF Science and Technology Center, invites applications for the position of **CENTER FELLOW**.

The Center is investigating the dark matter problem through four lines of experimental attack: using conventional and cryogenic detectors to detect the interaction of dark matter particles in the laboratory; studying the diffuse radiations from the early universe (particularly the 3K microwave background); using distant supernovae to determine how much dark matter exists; and studying the role of dark matter in the evolution of large-scale structure. The Center Fellowship is intended to provide a young experimentalist with the opportunity to bring fresh insight (particularly from other fields of physics) to bear on the dark matter. This two-year position will start in October 1994, with a possible extension for a third year.

Candidates should have a Ph.D. in Physics or Astronomy. Salary will be commensurate with experience. Interested applicants should submit a statement of their research interests, curriculum vitae, and arrange for letters of support from three referees who are familiar with their work. These items and a letter of application should be sent to:

**Professor Bernard Sadoulet  
Center for Particle Astrophysics  
301 Le Conte Hall  
University of California  
Berkeley, CA 94720**

The closing date for applications will be January 1, 1994. *The University of California is an Affirmative Action/Equal Opportunity Employer.*



# MEETING



## Paris Conference on Apoptosis in AIDS and Cancer

December 2 - 3 - 4, 1993 - The Senat, Paris, France

Under the Aegis of :

World Foundation for AIDS Research and Prevention • The OTSUKA American Pharmaceutical, Inc • The LXR Biothechnology Inc, USA

### Conference President

Luc MONTAGNIER, Paris

### Conference Co-President

L. David TOMEI, San Francisco,

### SCIENTIFIC COMMITTEE

Philip J. BARR (San Francisco)

J. John COHEN (Denver)

Frederick O. COPE (Colombus)

Linda R. GOODING (Atlanta)

Marie-Lise GOUGEON (Paris)

Mauro PIACENTINI (Rome)

...

### LIST OF SPEAKERS WILL INCLUDE

Jean Claude AMEISEN (France)

Carl BARRETT (USA)

Dale BREDESEN (USA)

Ralph BUTTYAN (USA)

John CIDLOWSKI (USA)

J. John COHEN (USA)

Frederick O. COPE (USA)

Laszio FESUS (Hungary)

Terry FINKEL (USA)

CLAUDE FRANCESCHI (Italy)

Linda R. GOODING (USA)

Pierre GOLSTEIN (France)

Marie-Lise GOUGEON (France)

Douglas GREEN (USA)

Ara HOVANESSIAN (France)

John T. ISAAC (USA)

John KERR (Australia)

Peter KRAMMER (Germany)

Joseph LOTEM (Israel)

Barbara OSBORNE (USA)

ARTHUR PARDEE (USA)

Mauro PIACENTINI (Italy)

John REED (USA)

David TOMEI (USA)

Eileen WHITE (USA)

### PROGRAM

#### WILL INCLUDE PRESENTATIONS ON :

- Apoptosis in the pathogenesis of AIDS
- Molecular mechanisms of apoptosis and its control
- Apoptosis in the immune system
- Apoptosis in carcinogenesis and cancer therapeutics
- The role of apoptosis in aging

...

Applicants are encouraged to submit abstracts for poster sessions:

**Application Deadline : November 10, 1993**

Registration Fee - \$395.00 (US)

(Includes welcome reception and lunches)

**For further Information and Application Forms contact:**

**MED-EDITION, BP 1215-16 . 75765 Paris Cedex 16**

**Tel : 33 (1) 45 70 38 62 - Fax: 33 (1) 45 70 30 78**



### Lamont-Doherty Earth Observatory of Columbia University Postdoctoral Fellowships in the Earth and Ocean Sciences

The Lamont-Doherty Earth Observatory of Columbia University invites recent Ph.D. recipients or candidates for their degrees in 1993, in any field of the Earth and Ocean Sciences, to apply for postdoctoral Fellowships beginning in September, 1994, with an annual stipend of \$33,000.

The Fellowships are institutionally supported for 21 months and the successful candidates are encouraged to apply for government funding to complete the final three months of their fellowship. They then become eligible for the annual competition for a Storke-Doherty Lectureship awarded annually to a junior scientist of the Observatory who is in no more than his or her second year of residence. The Lectureship is for four years and is accompanied by 24 months of salary support. The recipient has the responsibility to teach a topical seminar. The lectureship is intended to recognize the potential for scholarly excellence, and to encourage outstanding young scientists to pursue careers in the basic research environment.

The deadline for completed applications for the Postdoctoral Fellowship is January 15, 1994. Application forms may be obtained by contacting the **Office of the Director, Lamont-Doherty Earth Observatory, Palisades, New York 10964. Telephone 914-365-8546. Fax: 914-365-2312.**

Award announcements will be made on or about February 28, 1994.

*Columbia University is an affirmative action/equal opportunity employer.*

### Faculty Positions Department of Microbiology and Immunology

The Department of Microbiology and Immunology, The Pennsylvania State University College of Medicine at Hershey is initiating the second phase of faculty recruitment associated with its ongoing expansion. We invite applications for tenure-track faculty positions from outstanding candidates who are working in immunology and/or virology. We are seeking individuals who are using molecular and cellular approaches to better understand the development, function, or regulation of the immune response. We are also seeking molecular virologists/biologists working with HIV or other retroviruses, DNA viruses, oncogenes as well as individuals studying the molecular basis of viral pathogenesis of RNA viruses. Candidates at the Assistant Professor level are preferred; however, outstanding candidates for positions at the Associate Professor level will be considered. All applicants must have a Ph.D. and/or M.D. degree, postdoctoral research experience and a strong record of research accomplishments. Successful applicants are expected to establish an extramurally funded research program. Availability of research facilities within the new Biomedical Research Building, strong departmental and interdepartmental graduate student training programs, and macromolecular synthesis core facilities all contribute to the productive research environment within the Department. Participation in the Department's graduate and medical student teaching programs is expected. Applicants should send their curriculum vitae, a statement of research interests and the names of at least three references to: **Dr. Richard J. Courtney, Chair, Department of Microbiology and Immunology, The Pennsylvania State University College of Medicine, Post Office Box 850, Department 100, Hershey, PA 17033. The Pennsylvania State University is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.**

### Molecular Biologist

The Laboratory of Biochemical Genetics, National Heart, Lung, and Blood Institute, is recruiting for an experienced molecular biologist for a post-doctoral, tenure-track position (salary range: \$45,000 to \$60,000). The research scientist should be an expert in studies on mammalian cell-E. coli shuttle vectors and homebox genes.

The candidate should hold a Ph.D. degree and at least (4) years of broad experience in the molecular biology of bacteriophages, viruses, prokaryotic cells, plant cells, and animal cells. Applicants should also have extensive experience in the cloning and characterization of DNA; the cloning and maintenance of bacteria, lower eukaryotic cells, and eukaryotic cells (plants and animals); sub-cellular fractionation (membranes, mitochondria, plastids, and nuclei); purification, structural and functional analysis of enzymes; chemical analysis of polysaccharides; and bacterial genetics including mutagenesis. **U.S. CITIZENSHIP IS REQUIRED.** Send C.V. and three (3) letters of recommendation to:

**Dr. Marshall Nirenberg  
Laboratory of  
Biochemical Genetics  
National Heart, Lung, and  
Blood Institute  
National Institutes of Health  
Building 36, Room 1C06  
9000 Rockville Pike  
Bethesda, Maryland 20892**

NHL is an Equal Opportunity Employer

## POSTDOCTORAL POSITIONS

The Gladstone Institute of Cardiovascular Disease, University of California, San Francisco.

Available immediately in the labs of:

**Robert W. Mahley, M.D., Ph.D.:** Study and development of transgenic mouse models of type III hyperlipoproteinemia, will examine effects of expression of apo E mutants on lipid metabolism and atherosclerosis.

**Israel F. Charo, M.D., Ph.D.:** Research on the molecular biology of monocyte-endothelial cell interactions in the vasculature. Current projects are focused on receptors for the rapidly emerging family of cytokines known as the chemokines. Methodology includes receptor mutagenesis and expression in *Xenopus* oocytes and mammalian cells.

**Karl H. Weisgraber, Ph.D.:** 2 positions: 1) Studies on the effect of overexpression of human genes on lipoprotein metabolism in transgenic mice. 2) X-ray crystallography of apolipoprotein E variants and other proteins involved in lipoprotein metabolism. Prior experience in protein crystallography is desirable.

**Stephen G. Young, M.D.:** 2 positions: Research on the structure and function of apolipoprotein B (apo B). Characterization of recently developed transgenic mice expressing large amounts of human apo B, generation of mice with targeted mutations in the apo B gene, and investigation of the molecular mechanism of hypobetalipoproteinemia. Experience with transgenic mice and/or molecular biology techniques is desirable.

**Thomas L. Innerarity, Ph.D.:** Study the mechanism and physiology of apo B RNA editing and investigate mutations of apo B 100 that disrupt LDL binding to the LDL receptor.

Candidates should possess an M.D. or Ph.D. in molecular biology or biochemistry. Competitive salary and benefits. Send C.V. and names of three references to: Postdoctoral Recruitment; Gladstone Institute of Cardiovascular Disease, UCSF; P.O. Box 419100; SF, CA 94141-9100. EOE.

The Lindsley F. Kimball Research Institute of the New York Blood Center invites applications for a **Molecular Biologist** to join the **Laboratory of Virology and Parasitology**, headed by Dr. Alfred Prince, to study approaches to the development of a Hepatitis C virus vaccine. Research will focus on:

- Development of expression vectors for HCV genes
- Evaluation of expression in mammalian systems
- Evaluation of protective efficacy of immunization strategies

Applicants should have a Ph.D. and a strong background in Molecular Biology with experience in construction and evaluation of prokaryotic and mammalian expression constructs.

Appointments can be made at the **Postdoctoral Fellow** or **Assistant Member** levels, depending on experience. Salaries will be determined based on qualifications and experience. Fringe benefits are excellent and include a housing allowance for post-doctoral fellows. Applicants should send their CV, list of publications, a statement of career goals, and the names and addresses of three references to: Dr. Alfred M. Prince, Head, Laboratory of Virology and Parasitology, **The Lindsley F. Kimball Research Institute of the New York Blood Center, 310 East 67th Street, New York, NY 10021, USA.** Equal opportunity employer m/f/d/v.

## **Lindsley F. Kimball Research Institute**

A Division of the New York Blood Center

Where concern for the community comes first.

## UNIVERSITY OF MICHIGAN DEPARTMENT OF BIOLOGY

The Department of Biology, University of Michigan, invites applications for tenure-track positions in the field of cellular, molecular and developmental biology. The Department has made a substantial commitment to new hiring in these areas. Three positions are immediately available and there is a possibility of a fourth. The areas of interest are molecular cell biology, molecular/cell biology of plant development, molecular/cell biology of animal development, and prokaryotic gene regulation. The existing appointments are at the junior level, but appointment at higher levels may be possible in exceptional circumstances. Candidates must have a Ph.D., postdoctoral training, a demonstrated record of publication and a strong interest in teaching. The successful candidates will join a large, diverse department with research foci ranging from molecular through organismal to ecosystem biology. In addition to establishing a strong research program, the successful candidates will be expected to participate in teaching undergraduate and graduate-level courses in their areas of expertise. Applications should include a current C.V., up to three relevant reprints and a brief statement of future research plans. Applicants should also request that three letters of reference be sent. All materials must be received by November 1, 1993, and should be directed to:

**Chair, Cell and Molecular Biology Search Committee**  
Department of Biology  
University of Michigan  
Natural Science Building  
Ann Arbor, Michigan 48109-1048

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



Make the most of your experience and expertise in a company that is committed to developing drugs for better health worldwide. Otsuka America Pharmaceutical, Inc. is currently seeking the following qualified individuals:

### **Ph.D. SCIENTIST**

Seeking a highly motivated Ph.D. Scientist with a degree in Physiology or Biochemistry and a minimum of 3 years of post-doctoral research experience. This individual will work on *in vivo* studies of energy metabolism such as glucose and fatty acid metabolism, therefore related experience is essential for this position. Skills in cell culture and/or organ culture will complement the on-going work in the area of cancer induced cachectic disease model (wasting and anorexia). Previous experience or knowledge in the field of cytokines will be helpful. Excellent communication skills and interest in interdisciplinary work are required.

### **GROUP LEADER**

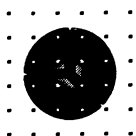
Scientist with experience in either an academic and/or pharmaceutical research environment, and a proven record of success evidenced by publications, to fill an important leadership role in the area of lung inflammation. We are seeking a senior level Ph.D. Scientist with background in the field of Inflammation and Endothelial Cell Biology. Knowledge of *in vivo* experiment of sepsis model, familiarity with the field of cell adhesion such as ICAM, ELAM will earn special consideration. This position requires a highly motivated individual with strong communication skills to interact with our in-house research groups such as Protein Chemistry, Molecular Biology, Fermentation, Immunology and Hematology.

Otsuka America Pharmaceutical, Inc. offers an attractive benefits plan which includes: company paid health insurance, dependent care flexible spending account, 401(k) plan, a fully paid retirement program and relocation assistance. To apply send curriculum vitae and names of references to:  
**Otsuka America Pharmaceutical, Inc., Attn: Helena Matos, 2440 Research Blvd., 5th Floor (120), Rockville, MD 20850. An Equal Opportunity Employer.**



*Otsuka People Creating New Products  
For Better Health Worldwide.*





## SENIOR RESEARCH SCIENTIST

The IMMUNE RESPONSE CORPORATION, a rapidly growing biotechnology company based in Carlsbad, California is currently seeking a Ph.D. level scientist to work on T-cell immunoregulation in autoimmune disease. The company's T-cell receptor peptide-based treatment of Rheumatoid Arthritis is currently in clinical trials. The position available will involve both the basic and clinical research associated with the development of therapeutic products for autoimmune disease.

THE IMMUNE RESPONSE CORPORATION offers a competitive compensation and benefits package and the opportunity to make a significant contribution in a stimulating, state-of-the-art, work environment. Interested candidates should mail or fax their C.V. to:

**Human Resources  
THE IMMUNE RESPONSE  
CORPORATION  
5935 Darwin Court  
Carlsbad, Ca. 92008  
(619) 431-8636**

*Equal Opportunity Employer*

## Biology Faculty Position University of California, San Diego

The Department of Biology at the University of California, San Diego, invites applications for a tenure track Assistant Professor faculty position. Preference will be given to individuals with a proven research interest in defining the spatial organization, the assembly, and the dynamics of complex cellular structures. Such studies might focus on cytoskeletal organization, membrane-cytoskeletal interactions, membrane biogenesis, cell adhesion, and cell motility. Individuals using innovative optical or electron microscopic techniques are particularly encouraged to apply. The successful candidate is expected to pursue a vigorous research program and to participate in graduate and undergraduate teaching programs. The position is available effective Fall, 1994, subject to availability of funding, with salary based on University of California pay scales.

Interested individuals should submit a curriculum vitae, a statement of prior experience, professional goals, and research interests, and the names of three references by December 15, 1993, to:

**Dr. John Newport  
Biology Search Committee  
c/o Ms. Carrie Garnett  
Department of Biology 0346  
University of California, San Diego  
9500 Gilman Dr.  
La Jolla, CA 92093-0346**

*The University of California, San Diego, is  
an equal opportunity/affirmative action  
employer.*

## AQUATIC ECOLOGIST

(Anticipated Position)

The National Biological Survey invites applications for a Research Fishery Biologist (GS-482-11/12) to serve as the Assistant Unit Leader for Fish at the New Mexico Cooperative Fish and Wildlife Research Unit. The successful candidate will be located at New Mexico State University, in Las Cruces, New Mexico, where the Unit is housed. The successful candidate will receive an adjunct faculty appointment to the Fishery and Wildlife Science Department in the College of Agriculture and Home Economics. Minimum qualifications include: Ph.D. in Aquatic Ecology, Aquatic Systems, Conservation Biology, Fishery Management or a related field with strong ecological or systems level training; specialization in aquatic systems with quantitative applications to contemporary resource management needs; publication record in area of expertise; and demonstrated experience working productively in a collaborative, interdisciplinary, or multidisciplinary setting. Desired qualifications include: course work and practical experience in the area of environmental contamination detection, ecological transfer, or interpretation of effects on organisms and systems; field and laboratory experience in aquatic systems research with application to fresh water fishery management; experience in a resource conservation or management setting in public or private sector; and familiarity with working in networked systems or microcomputers, minicomputers, and mainframe terminals.

For application details, contact Dr. Phillip Zwank at the New Mexico Cooperative Fish and Wildlife Research Unit ((505)646-6053). The National Biological Survey will pay up to \$10,000 for associated moving expenses as authorized by Federal Travel Regulations.

*The U.S. National Biological Survey is an Equal Opportunity Employer.*

## RECEPTOR STRUCTURE-BASED DRUG DESIGN

Agouron Pharmaceuticals, Inc., a recognized pioneer and leader in the field of rational drug design, is located in San Diego, California in the midst of a dynamic and challenging environment of academic and industrial research centers. We are seeking talented Ph.D. scientists to join our multidisciplinary team in the following areas:

**Pharmacology** — The successful candidate will participate in research and preclinical development programs focused on the identification of novel anticancer and antiviral agents. Applicants with up to 5 years of postdoctoral experience should have a broad knowledge of the use of *in vitro* and *in vivo* models of efficacy, pharmacology and safety studies, together with an interest in drug metabolism and pharmacokinetics. Code 9SW.

**Protein crystallography** — A background in macromolecular crystallography, including experimental aspects of structure solution and refinement, is required. The successful candidate will also have experience in the use of high resolution molecular graphics for structure analysis and interpretation. Applicants should be interested in computer graphics-assisted design of ligands in the context of a multidisciplinary team that includes synthetic organic and computational chemists as well as crystallographers. Code 9DM.

We offer competitive salaries and benefits in a superb location. Please send résumés (coded to the position for which you are applying) in confidence to:

Human Resources

  
**Agouron.**  
Pharmaceuticals, Inc.

10350 N. Torrey Pines Road, La Jolla, California 92037

## ■ Scientists

Miles Inc., Diagnostics Division, a worldwide developer of clinical laboratory instruments, is expanding its research and development activities in the fast-growing and challenging area of automated, high sensitivity immunoassays.

There are immediate positions available for forward thinking R&D scientists, at the Ph.D. level, with solid academic training and 3-4 years' industrial or postdoctoral experience in immunochemistry, protein chemistry, or immunoassay development.

Challenging career opportunities are also available for highly motivated scientists at the BS/MS level with immunoassay product development experience.

The Diagnostics Division offers an environment conducive to professional growth as well as an excellent compensation and benefits program. Send CV in confidence to:

**Manager of Human Resources, Technical  
Staffing, Miles Inc., Diagnostics Division, 511  
Benedict Ave., Tarrytown, NY 10591.** An Equal  
Opportunity Employer M/F/H/V.

**MILES**   
**Diagnostics Division**

## POSITIONS OPEN

### MOLECULAR GENETIC/GENE THERAPY POSTDOCTORAL RESEARCH FELLOW POSITION

The Section of Medical Genetics at the School of Veterinary Medicine, University of Pennsylvania, is seeking a postdoctoral fellow to join a large program in comparative molecular genetics of inherited diseases of companion animals as models of human diseases. A canine model of phosphofructokinase deficiency causing hemolysis and myopathy is being used to characterize the molecular pathogenesis, and to develop and evaluate muscle and stem cell gene therapy. Studies include retroviral vector development, bone marrow and myoblast transplantation, and tissue specific gene expression.

Applicants should have a doctoral degree (Ph.D., D.V.M., M.D.), and training in molecular genetics and cell biology is highly desirable. Applications should include curriculum vitae and names, address, telephone/FAX numbers of three references, and should be directed to: **Dr. Urs Giger, VHUP, 3850 Spruce Street, Philadelphia, PA 19104-6010, Telephone: 215-898-8830, FAX: 215-573-2162.**

*The University of Pennsylvania is an Equal Opportunity Employer.*

**POSTDOCTORAL FELLOWSHIP** to start immediately for Ph.D. Molecular Biologist with experience in standard molecular biology techniques. This could lead to a faculty position affiliated with Loma Linda University. The research work is performed in a large, multidisciplinary laboratory. Salary and benefits are competitive. Apply to: **D. J. Baylink, M.D., VA Medical Center (151), 11201 Benton Street, Loma Linda, CA 92357.**

**POSTDOCTORAL ASSOCIATE**—Postdoctoral position available for individual to perform analysis of expression and experimental manipulation of genes encoding growth factor ligand/receptor and cell adhesion molecules in newly developed transgenic mouse models of malignant skin melanoma. Strong experience in molecular biology techniques required. Send curriculum vitae and names of three references to: **Dr. Beatrice Mintz, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. We are an Affirmative Action/Equal Opportunity Employer.**

**POSTDOCTORAL ASSOCIATE** wanted for studies of protein ubiquitination. Specific areas include (1) structure-function studies of ubiquitin ligation pathway enzymes, and (2) regulation of mitotic cyclin degradation in yeast. Experience in biochemistry or yeast genetics desired. Send curriculum vitae and three letters of reference to: **Dr. David K. Gonda, Department of Molecular Biophysics and Biochemistry, Yale University School of Medicine, 333 Cedar Street, P.O. Box 3333, New Haven, CT 06510. An Equal Opportunity Employer.**

**POSTDOCTORAL RESEARCH ASSOCIATE POSITION** available immediately at the University of Georgia Complex Carbohydrate Research Center (CCRC) to work on the structural characterization of oligosaccharides through neural network-based pattern recognition of spectra. Ph.D. in chemistry or biochemistry and experience with NMR spectroscopic techniques required; background in computational chemistry and/or neural networks preferred. The CCRC operates in an interdisciplinary setting with state-of-the-art analytical instrumentation and computing facilities. Salary commensurate with experience. Send application letter, curriculum vitae, and names and addresses of three references by October 4, 1993, to: **Dr. Jan U. Thomsen, Complex Carbohydrate Research Center, The University of Georgia, 220 Riverbend Road, Athens, GA 30602-4712, USA.** For more information you may contact Dr. Thomsen at **706-542-4436. An Affirmative Action/Equal Employment Opportunity Employer.**

**A POSTDOCTORAL RESEARCH POSITION** is available for a Ph.D. with molecular biology experience to study transcription factors involved in the regulation of protein metabolism during sepsis and other critical illness. Experience with techniques in the field of molecular biology required. Please submit cover letter, curriculum vitae and references to: **Per-Olof Hasselgren, M.D., University of Cincinnati Medical Center, Department of Surgery, 231 Bethesda Avenue ML #558, Cincinnati, OH 45267.**

## POSITIONS OPEN

**RESEARCH ASSOCIATE/ASSISTANT** positions to study (i) mechanism of eukaryotic DNA replication, or (ii) molecular biology of estrogen function in breast cancer. Positions require publication and proven experience in molecular biology/enzymology/molecular genetics. Competitive salary. Contact: **Dr. S. Biswas, BRB 10-035, University of Maryland Medical School, Baltimore, MD 21201.**

**POSTDOCTORAL ASSOCIATE**—A five-year Postdoctoral Associate position is immediately available to study the molecular regulatory mechanisms of differentiation of osteoblasts and cementoblasts. Strong background and experience in gene transfer, gene cloning and characterization, and PCR techniques are required. Send curriculum vitae and the names of three references to: **Dr. Moon-Il Cho, State University of NY at Buffalo, Department of Oral Biology, 3435 Main Street, Foster Hall, Buffalo, NY 14214-3092. We are an Affirmative Action/Equal Opportunity Employer.**

Northwestern University Medical School. A position is open for a **RESEARCH ASSOCIATE** interested in glial cells in both normal and pathological conditions. Particular emphasis will be on astrocytes during CNS inflammation due to demyelinating autoimmune and viral diseases both *in vivo* and in culture conditions, and on oligodendrocytes and Schwann cells during CNS remyelination. The candidate should be a cell biologist with experience in basic molecular techniques. Send résumé and a list of three references to: **Dr. M. C. Dal Canto, Department of Pathology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611-3008.**

*Northwestern University is an Affirmative Action/Equal Opportunity Employer. Hiring is contingent upon eligibility to work in the United States.*

### ECOLOGIST

The Nature Conservancy seeks an ecologist to coordinate ecological classification, inventory, and mapping work in support of conservation efforts in the Latin America and Caribbean region. This position focuses on vegetation classification, providing leadership in the development and application of Rapid Ecological Assessment techniques. Requirements include: advanced degree with specialization in vegetation ecology; experience in Latin America; familiarity with major neotropical ecosystems; experience with remote sensing based land cover mapping; and fluency in Spanish or Portuguese. Send curriculum vitae and names of three references to: **Dr. Bruce Stein, Director, Latin America Science Program, The Nature Conservancy, 1815 North Lynn Street, Arlington, VA 22209. The Nature Conservancy is an Equal Opportunity Employer.**

### SENIOR SCIENTIST

Direct R&D in marine meteorology. Develop systems for predictions and communications. Analyze routing strategy and vessel needs, and conduct research. Requires experience with seakeeping software, FORTRAN, C, MS and NDP compilers and navigation instruments. Requires Ph.D. in marine meteorology or equivalent and 1 year in marine meteorology or 2 years of software R&D in related nautical field. \$50,500 to \$52,000 per year, 40 hours per week. Job interview site: Sunnyvale, California. *Must have the legal authority to work in the United States.* Send ad with résumé to: **Job #TGA42040, P.O. Box 269065, Sacramento, CA 95826-9065. Equal Opportunity Employer.**

The Anatomy Department of the Medical College of Ohio is opening a search for a tenure-track or tenured **NEUROBIOLOGIST** studying neural organization at the molecular, cellular, or system level. Applicants for an assistant professorship should be able to demonstrate an ability to establish an independent and funded research program. Applicants for more senior appointments should have an ongoing, funded program. Teaching responsibilities will be in Histology. The Medical College and the Department of Anatomy offer freedom of time to pursue research, excellent core facilities, very competitive salaries, and generous start-up funds. Forward curriculum vitae, a brief statement of research plans, and the names of 3 to 4 references by **JANUARY 1, 1994**, to: **John T. Wall, Faculty Search Committee, Department of Anatomy, Medical College of Ohio, Toledo, OH 43699-0008. Equal Opportunity Employer.**

## POSITIONS OPEN

### PHYSICAL SCIENCE RESEARCH ASSOCIATE E. L. GINTZON LABORATORY

Responsibilities include development of numerical analysis for the study of device physics in semiconductor lasers, electronic devices and optoelectronic devices. Applicants are required to have a Ph.D. in EE or Applied Physics, 3 or more years of work experience in the field. Experience in vertical cavity lasers, high-power semiconductor lasers, quantum optics, optical properties of semiconductors and low dimension systems, solid state physics, spectral, noise and modulation properties of semiconductor lasers, modal behavior of resonators, nonlinear propagation of EM waves are required. Please send an application, curriculum vitae, list of publications and names of 3 references to: **Prof. C. Chang-Hasnain, E. L. Gintzon Laboratory, Stanford University, Stanford, CA 94305-4085 by September 30, 1993.**

### MOLECULAR BIOLOGIST

The Department of Biology of City College of the City University of New York seeks to fill a tenure-track position for a molecular biologist with interests in gene regulation that include, but are not necessarily limited to, control of oncogenes, signal transduction, DNA repair or cell-cell interactions. New core facilities including an automated DNA sequencer and a fluorescence-activated cell sorter are available. The candidate will join an NIH-sponsored research center in cell and molecular biology involving 25 faculty from several departments. Successful candidate will be expected to participate in teaching at both the undergraduate and graduate (M.A. and Ph.D.) levels, as well as mount a strong externally funded research program, which would include undergraduate and graduate students. Competitive start-up funds are available. Salary range \$29,931 to \$73,296. Rank and salary will depend upon experience and qualifications. Please send detailed curriculum vitae, including research references by November 6, 1993, to: **Dr. Tadmiri Venkatesh, Chair of Search Committee, Department of Biology, City College of New York, Convent Avenue at 138th Street, New York, NY 10031. An Affirmative Action/Equal Opportunity Employer, M/F.**

### BEHAVIORAL AND BIOCHEMICAL NEUROPHARMACOLOGISTS

Molecular Geriatrics Corp. invites applications for the posts of **SENIOR SCIENTIST, STAFF SCIENTIST and MASTER TECHNICIAN.** Based in the Pharmacology Department, interested individuals will perform biochemical and behavioral research leading to therapeutic interventions in neurodegeneration including stroke, epilepsy and Alzheimer's Disease. We have particular interest in learning, memory and amnesic processes and modeling. Preference will be given to candidates with good publication records demonstrating continuous scientific achievement. Molecular Geriatrics Corporation is located in Lake Bluff, Illinois, a northern suburb of Chicago on the shores of Lake Michigan. Submit curriculum vitae, statement of research interests and the names, addresses and telephone numbers of three references to: **Jonathan J. Lipman, Ph.D., Pharmacology Group Leader, Molecular Geriatrics Corp., 101 Waukegan Road, Suite 970, Lake Bluff, IL 60044. Equal Opportunity/Affirmative Action Employer.**

The Human Gene Therapy Research Institute (HGTRI) at Iowa Methodist Medical Center is actively recruiting **M.D. and Ph.D. SCIENTISTS** of various experience levels with expertise in hematology/oncology, infectious diseases, genetics, molecular biology, surgical oncology and neurosurgery to participate in the development and initiation of human gene therapy clinical trials. The HGTRI was established in 1993 under the direction of **Dr. Kenneth W. Culver** and contains more than 12,400 square feet of laboratories and clinical facilities. Iowa Methodist Medical Center is a 710-bed non-profit tertiary care hospital located in Des Moines, Iowa. Academic affiliates with Iowa State University and the University of Iowa provide an ideal environment for the efficient development of gene therapy as a new treatment modality and clinical discipline. Please forward a copy of your curriculum vitae to: **Dr. Kenneth W. Culver, Human Gene Therapy Research Institute, Iowa Methodist Medical Center, 1415 Woodland Avenue, Des Moines, IA 50309.**



**ENDOWED EMINENT SCHOLAR & FACULTY POSITION  
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The Georgia Institute of Technology invites applications for an endowed, tenure-track faculty position in Atmospheric Chemistry and/or Air Quality Management. The position is accompanied by a \$1.5 million endowment, funded in part by the Georgia Research Alliance, and an appointment at the rank of Full Professor in the School of Earth and Atmospheric Sciences at Georgia Tech. In addition to his or her normal academic duties, the Scholar will head a statewide effort among Georgia's major research universities to develop and apply air quality forecasting tools capable of providing guidance to local, regional, national, and international economic planning boards and environmental management agencies.

The successful candidate should have a record of scientific excellence and leadership commensurate with a senior academic appointment. While all areas of specialization in atmospheric chemistry and air quality management will be considered, preference will be given to scientists working on urban- and regional-scale air quality modelling.

Applications and inquiries should be forwarded to:

**Dr. C.S. Kiang, Chairman  
Eminent Scholar Search Committee  
School of Earth and Atmospheric Sciences  
Georgia Institute of Technology  
Atlanta, GA 30332**

**e-mail: carol.thomas@eas.gatech.edu**

**PHONE: Voice: (404) 894-1748**

**FAX: (404) 853-0232**

The deadline for submission of applications is December 1, 1993. The Search Committee intends to begin interviewing candidates in January, 1994.

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The successful candidate for this position will desire to work in a fast-paced, team-oriented environment. We are located in suburban St. Louis at a multi-disciplinary research campus which conducts both fundamental and applied research in developing novel human health care products. Searle, a wholly owned subsidiary of Monsanto Company, offers a competitive salary and benefits package and excellent career opportunities.

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We require a PhD or other advanced study in Analytical Chemistry, Biochemistry or related fields. Experience in mass spectrometry, protein handling and HPLC is desirable.

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 and salary history to: **Patricia Handy, D-583, AP6D, Job# SM55294, Abbott Laboratories, One Abbott Park Rd., Abbott Park, IL 60064.** Abbott is an Affirmative Action Employer/Smoke-Free Environment.

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We have several openings for Associate Research Scientists in the Institute for Molecular Biologicals to participate in integrated research programs to discover and characterize novel proteins of potential therapeutic value.

The candidate must have proven experience in animal cell culture, transfection methodologies, characterization of novel cell lines, and bioassay development. Proficiency with DNA/RNA methodologies and/or the expression, purification, and characterization of recombinant proteins is essential. A Bachelor's degree and either a Master's degree or 2-3 years' experience in a relevant area is required.

We offer a competitive salary and comprehensive benefits package. If you'd like to join our team, please send resume to: **Miles Inc., Pharmaceutical Division, Dept. ELJG, 400 Morgan Lane, West Haven, CT 06516.**

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Darwin Molecular Corporation--a new, information-intensive, biotechnology company--seeks several outstanding scientists to head its scientific divisions and to participate in shaping and building the company. Darwin's technical focus is on the acquisition and use of DNA sequence information to identify and select targets for drug discovery *via* molecular evolution. Darwin's initial therapeutic focus is on autoimmune disease, AIDS, and cancer. Our molecular evolution program will include peptides and oligonucleotides but will emphasize small organic molecules as drug leads.

The company will make key senior appointments of individuals with strong interdisciplinary interests who wish to expand their scientific vision, join a high caliber, motivated team and help forge a novel and exciting enterprise. Successful candidates will be experienced, innovative scientific leaders with an outstanding record of accomplishment, who have the broad scientific interests and leadership skills to form and direct a scientific team in a highly interactive non-traditional environment.

The key areas for scientific leadership at Darwin are:

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- Molecular Evolution
- Molecular Biology & Biochemistry
- Computational Biology

The individuals selected will contribute to the formative stages of a unique, new company, will be competitively compensated, and will benefit significantly from the growth of Darwin through equity participation.

Darwin is located in the livable Seattle area, which enjoys a vigorously growing biotechnology community.

Send resume and inquiries to: Human Resources, Darwin Molecular, 2405 Carillon Point, Kirkland, Washington 98033. Phone: 206/828-7403; Fax: 206/828-2618; E-mail: kathy@darwin.com

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Wayne State University

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Wayne State University invites applications for the position of Professor and Chair of the Department of Psychology. The 40-member department is in a newly formed College of Science and offers Ph.D. programs in Bio-psychology, Clinical (APA-accredited), Cognitive, Developmental, Industrial/Organizational, and Social Psychology. Wayne State University, located in Detroit's Cultural Center, is an urban research University serving 34,000 students. The Department has strong ties to the WSU School of Medicine, the Merrill-Palmer Institute for Family and Human Development, the Institute of Gerontology, and major industries and health care organizations.

We seek an academic leader to enhance the research and teaching programs of the Department. Candidates should have a distinguished record of scholarly activity, a nationally recognized research program, broad appreciation of basic and applied research, and a strong commitment to graduate and undergraduate education. A doctorate in psychology or a related field is required. Nominations or letters of application, curriculum vitae, and names of at least three references should be sent to: Professor Carl R. Johnson, Psychology Search Committee, 275 Chemistry, Wayne State University, Detroit, MI 48202. The search will remain active until the position is filled; credentials will be reviewed as they are received. Wayne State University is an Equal Opportunity/Affirmative Action Employer. WSU: People working together to provide quality service.

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Nalco offers excellent salary and benefits programs. For consideration, please send resume to **Karen Nordquist, Manager, Technical Employment**, Nalco Chemical Company, One Nalco Center, Naperville, IL 60563-1198. Fax: 708-305-2920. An Equal Opportunity Employer.

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Applications are invited by the Governing Body of the College for the following full-time statutory post:

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The department is active in all the major areas of Computer Science. It has been particularly active in research in Artificial Intelligence, Computer Networks, and Software Engineering. At present there is a complement of fourteen academic staff including two full professors and one associate professor. Candidates with interests and proven performance in research in Computer Science are invited to apply.

The professor will have the opportunity to play a leading role in the development of a new industry-sponsored advanced parallel super-computing facility currently being established on campus.

Prior to application, further information (including application procedure) may be obtained from the Personnel Office, University College Dublin, Belfield, Dublin 4, Ireland (quoting above reference number). Telephone enquiries: (+353-1) 7061412/7061508. FAX: (+353-1) 2692472.

The closing date for receipt of completed applications is: Thursday, 16 December 1993.

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## CENTER FOR NEUROSCIENCE UNIVERSITY OF CALIFORNIA, DAVIS ADVERTISEMENT FOR FACULTY POSITIONS

The Center invites outstanding individuals in developmental neurobiology to apply for faculty appointments as Assistant and Associate Professor, rank commensurate with qualifications. These positions are part of a major commitment to further, through the Center, the development of neuroscience at UC Davis. We seek candidates who use molecular and cellular approaches to address problems in the development of nervous systems. Appropriate research areas include establishment and maintenance of specific connections in the nervous system, mechanisms that underlie neuronal differentiation, and development. Preference will be shown to applicants who have both evolutionary and functional perspectives.

The Center for neuroscience is a campus-wide unit involving faculty from five different colleges/schools at Davis. The faculty's fields of research range from a systems approach to cellular neurobiology. The University of California is an affirmative action/equal opportunity employer.

The selection committee will begin to review applications on October 15; these positions will remain open until filled.

Applicants should send curriculum vitae and the names of at least three references to:

Michael S. Gazzaniga, Ph.D.  
Director, Center for Neuroscience  
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Davis, CA 95616

## FACULTY POSITION IN MOLECULAR GENETICS UNIVERSITY OF FLORIDA COLLEGE OF MEDICINE

The Center for Mammalian Genetics and the Department of Biochemistry & Molecular Biology in the University of Florida College of Medicine invite applications for a tenure-track faculty position at the level of Assistant Professor. The successful applicant will have his/her primary appointment in the Department and will join 23 Center faculty with diverse interests in mammalian genetics. Applicants should have research interests in any of the following areas: human molecular genetics, developmental genetics, gene therapy, neurogenetics, and physical mapping. The Center and Department are housed in the recently opened Academic Research Building, and the appointee will have excellent laboratory facilities, a competitive salary, an attractive start-up package, and access to outstanding state-of-the-art molecular genetic core facilities. This is an interdisciplinary appointment designed to encourage extensive interaction with faculty throughout the College of Medicine and University of Florida.

Candidates should have a Ph.D. and/or M.D. degree with strong research training in molecular and/or mammalian genetics, including post-doctoral experience. A curriculum vitae, a description of research experience and interests, and three letters of reference should be sent to: Edward K. Wakeland, Director, Center for Mammalian Genetics, College of Medicine, University of Florida, Gainesville, FL 32310-0245. The closing date for submission of completed applications is December 1, 1993.

*The University of Florida is an Equal Opportunity/Affirmative Action Employer and specifically invites and encourages applications from qualified women and minority candidates.*

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We require a PhD or other advanced study in Analytical Chemistry, Biochemistry or related fields. Experience in mass spectrometry, protein handling and HPLC is desirable.

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 and salary history to: Patricia Handy, D-583, AP6D, Job# SM55294, 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

### COAGULATION SCIENTIST

Instrumentation Laboratory (IL), a worldwide leader in the research and development of reagent biomedical instrumentation test systems, is currently seeking an individual for its Lexington, Massachusetts, facility. Responsibilities include research and development of blood coagulation controls, reagents and kits to be used on our instrumentation. Incumbent will participate in projects from the concept stage through development and to final market release. Qualified candidate will have a minimum of a B.S. degree in a biological science plus a minimum of three years of related experience in product development, preferably in an industrial environment. High level of independence and ability to meet rigorous deadlines are required.

IL offers an excellent salary and benefits package including 401(k) and tuition reimbursement. Interested candidates should submit résumé and salary history to: **Christopher Hatt, Human Resources, Instrumentation Laboratory, 113 Hartwell Avenue, Lexington, MA 02173-3190. IL is an Equal Opportunity Employer.**

**MOLECULAR BIOLOGIST**—The Deborah Research Institute, a private non-profit research institute, has a position available for a Molecular Biologist to work in the cardiovascular system and muscle. This person must have a Ph.D., preferably in cell biology, biochemistry or molecular biology with at least two years of postdoctoral experience in a molecular genetics laboratory. The person must have capability of developing an independent active research program, as well as collaborating with other basic and clinical scientists. Interested persons should submit current curriculum vitae, three published papers or manuscripts, and addresses of three references. Beginning date: January 1, 1994. Send information to: **C. D. Ianuzzo, Ph.D., Director, Deborah Research Institute, Trenton/Pine Mill Roads, Browns Mills, NJ 08015-1799. Telephone: (609) 893-1016, FAX: (609) 893-2441. An Equal Opportunity Employer.**

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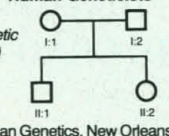
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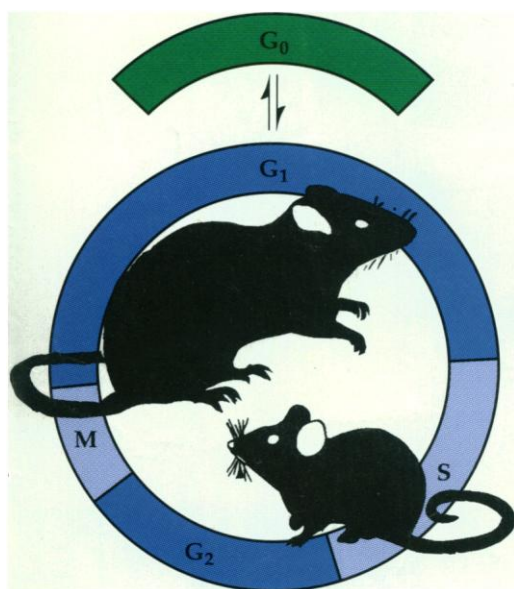


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A new methodology is now available to determine cell cycle activation based upon the increased expression of cyclin-dependent kinases (CDK). Recent research has determined that the progression of the cell from  $G_0$  to  $G_1$  and through M phase is controlled by CDK. These enzymes function at various positions in the cell cycle to prepare the cell for replication. Paracelsian has converted these findings into a simple to use ELISA (patent pending) format that permits the quantification of CDK as a measure of cellular activation. Rat, mouse, human, woodchuck, chicken, and fish cells demonstrate positive reactivity.



## Advantages

- Uses no radioisotopes or toxic chemicals
- Eliminates labor intensive immunohistochemistry
- Can be used with any laboratory animal study design or with cell cultures
- No pretesting surgery necessary
- Daily administration of marker compound not required
- Endpoint readily quantified for dose-response studies
- Kit contains confirmatory PCNA (Proliferating Cell Nuclear Antigen) ELISA

FOR ADDITIONAL INFORMATION  
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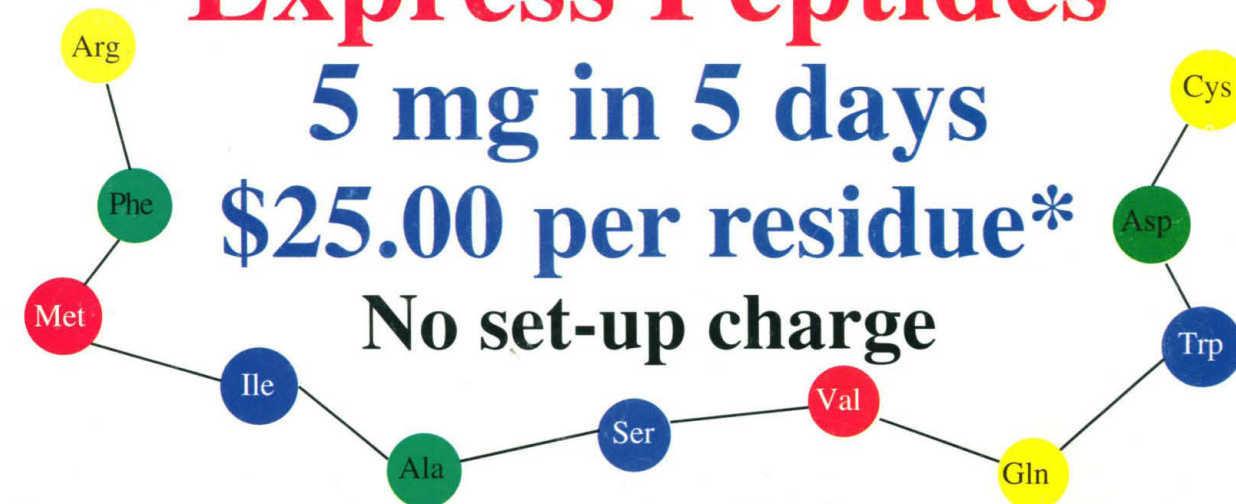
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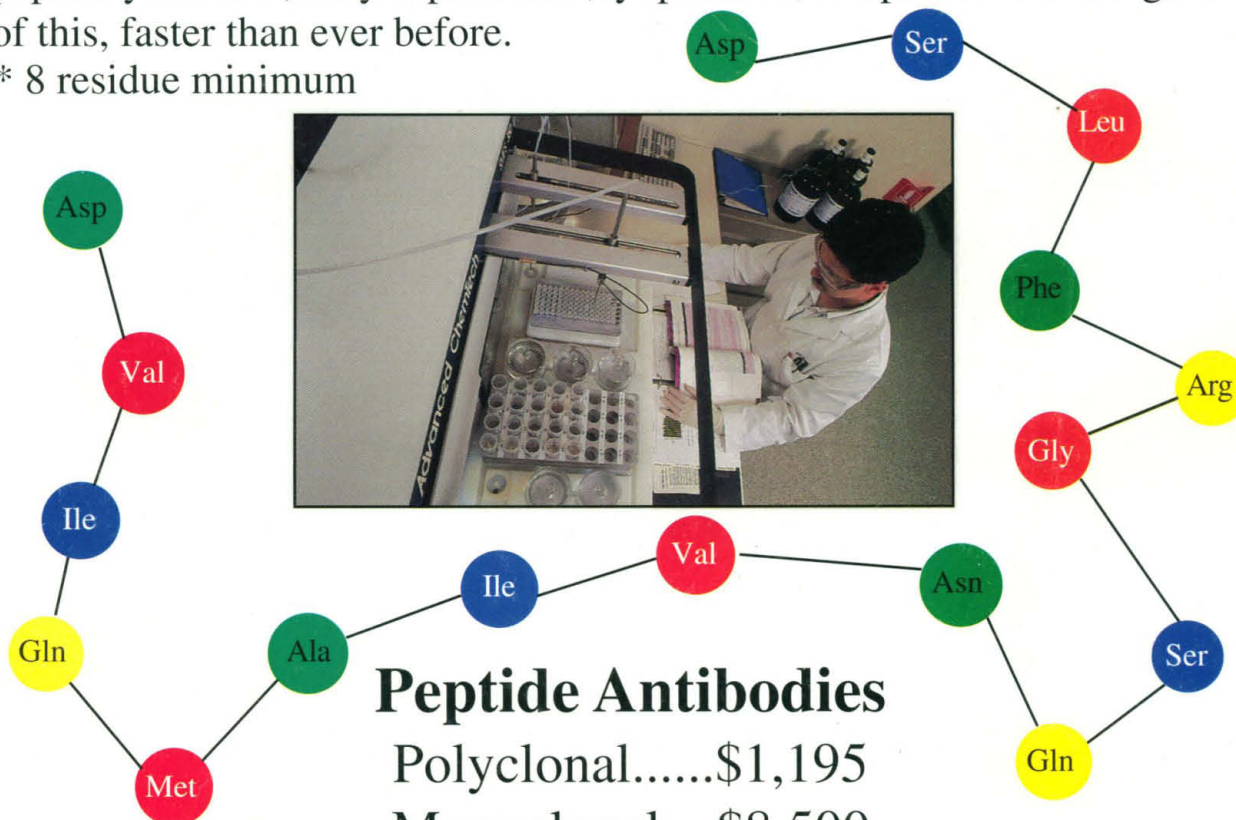
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