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## A Revolution in Oligonucleotide Synthesis!

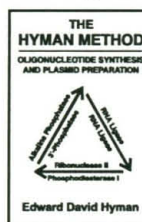
### Throw away your amidite machines

Announcing the Hyman method, a new method for synthesizing oligos.

- entirely enzymatic, no highly reactive chemicals or functional groups
- entirely aqueous system, no organic solvents
- entirely solution based, no columns
- low cost nucleotide reagents, stable in water, stable to heat
- no base protecting groups, no post-synthetic deprotection
- 30 to 60 minute cycle time
- continuous synthesis scale, 0.1 ml to 1,000,000+ liters
- all biodegradable and non-toxic, no waste disposal problems
- simple post-synthetic purification, no reverse phase columns
- ideal for inexpensive pharmaceutical scale oligo production
- simultaneous synthesis of 1,000 oligos per day on a benchtop machine
- ideal for molecular biology applications, sequencing primers, PCR, etc.
- makes DNA, RNA, 2'-O-CH<sub>3</sub> RNA, arabinose, and chimeric oligos
- makes oligos with base analogs, fluorescent or biotin tags, wobbles, etc.

If you are planning a project which uses oligos, learn in detail how this new technology works and how it can enhance your project capabilities. Do not make the mistake of buying an amidite machine, which will be outdated by the time you receive it. Learn how the next generation of benchtop oligo synthesizers will offer 100 fold increased throughput.

### Title: The Hyman Method: Oligonucleotide Synthesis and Plasmid Preparation



219 pp, 64 tables and illus, ISBN 0-9645452-0-9  
Author: Edward David Hyman, copyrighted  
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## **Multiplex PCR**

Optimization of multiplex polymerase chain reaction (MPCR) often requires testing a variety of reaction conditions. The MPCR Optimizer Kit makes MPCR a simple and routine procedure. Whether the template is RNA, DNA, or plasmid, a single run with the kit can identify the optimal conditions for high reproducibility and specificity. **Maxim Biotech. Circle 139.**

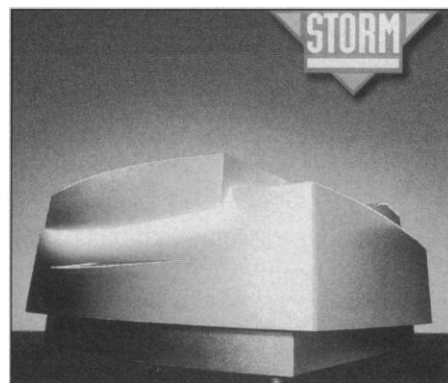
## **Reagent for RNA, DNA, and Protein Isolation**

TriPure Isolation Reagent is a flexible, ready-to-use reagent for isolating RNA, DNA, and protein from tissues or cells of human, animal, plant, or bacterial origin. A mono-phase solution composed of phenol and guanidine thiocyanate, the reagent reduces the entire RNA isolation procedure to approximately 1 hour. The isolated total RNA is undegraded, is free of protein and DNA contamination, and has an A260/280 ratio of 1.6-2.0. It is suitable for Northern blot analysis, reverse transcriptase polymerase chain reaction, poly(A)<sup>+</sup> selection, in vitro translation, ribonuclease protection assays, cloning, or polymerase chain reaction. **Boehringer Mannheim. Circle 140.**

## **Gel and Blot Analysis System**

The Storm system for gel and blot analysis unites storage phosphor radiography, fluorescence, and chemifluorescence detection

in a single instrument. The system is designed to meet the need of researchers who wish to use emerging fluorescence-based gel and blot imaging techniques while continuing to use autoradiography for applications



that require the use of radioisotopes. The optical components required for the system's three-in-one capability are integrated into a single scanning element. The system's 35 cm by 43 cm scanning area accommodates sequencing gels and other large samples. **Molecular Dynamics. Circle 141.**

## **Activity Coefficient Software**

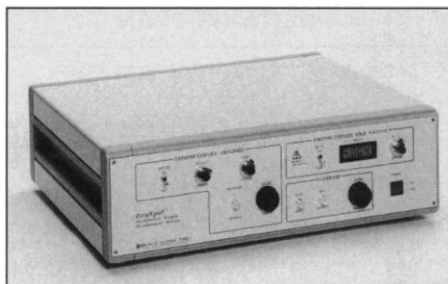
Windows-based PC-UNIFAC 5.0 calculates activity coefficients, vapor pressures, and related thermodynamic properties of organic compounds in mixtures from chemical structure. Structures are entered through molecular formula, CAS number, SMILES notation, or UNIFAC groups. **BRI. Circle 142.**

## **Atomic Force Microscopy of Fluids**

TappingMode atomic force microscopy technology has been extended to operate in fluids. TappingMode is used for nondestructive imaging of surfaces of soft materials and provides sub-angstrom vertical resolution and nanometer lateral resolution. This extension of the technology is important for biological applications where many fragile

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samples are best imaged in native or near-native fluids or in preservation media such as alcohols or glutaraldehyde. Samples that can be examined include DNA, DNA-protein complexes, chromosomes, RNA transferase, whole cells, and more. **Digital Instruments. Circle 143.**



### Plasmid DNA Purification

MonsterPrep is a kit for obtaining up to 30 mg of plasmid DNA in 2 hours. The kit handles up to 3 liters of overnight culture and yields supercoiled, plasmid DNA from high copy number vectors. The DNA obtained is suitable for enzymatic manipulations including sequencing, restriction enzyme digestion, in vitro transcription, and polymerase chain reaction. **BIO 101. Circle 144.**

mized because the lifetime, not intensity, of the phosphorescence is used to determine concentration. Oxygen levels from saturation down to less than 0.01 torr can be measured. Applications include in vitro metabolic studies of cell organelles, cells, and perfused organs and in vivo research. **Medical Systems. Circle 145.**

### Literature

Stratagene 1995 is a catalog that features an expansion of the company's product line for molecular and cellular biology to other fields such as neurobiology and genetic toxicology. New products for polymerase chain reaction (PCR) include TaqPlus DNA polymerase, which increases the length, yield, and reliability of PCR products up to 35 kb, and the ExSite PCR-based site-directed mutagenesis kit. **Stratagene. Circle 146.**

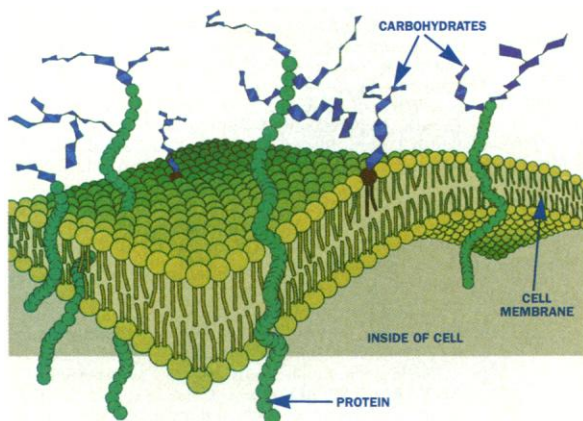
1995 *Applications Compendium Catalog* features hundreds of liquid chromatography applications, new columns, and accessories for pharmaceutical, environmental, food, and chemical separations. **Keystone Scientific. Circle 147.**

*The Fisher Catalog 95/96* is a comprehensive 2634-page encyclopedia of laboratory equipment. It includes instruments, supplies, and reagents—virtually anything needed to equip a lab can be found in its 45,000 catalog numbers. **Fisher Scientific. Circle 148.**

*NALGENE Labware Catalog* offers 218 pages of plastic products, including pricing and technical information, with more than 40 new products. **Nalge Co. Circle 149.**

*Milli-Q PF Plus Water Purification System* describes a unit designed for the production of ultrapure water for use in polymerase chain reaction and other life science techniques sensitive to water-borne contamination. **Millipore. Circle 150.**

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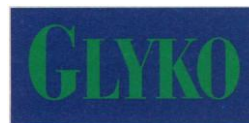
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# SCIENCE

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*Science* reserves the right, at its discretion, to edit or decline to publish advertisements submitted to it.

## POSITIONS OPEN

### ASSISTANT/ASSOCIATE PROFESSOR MEDICINAL CHEMISTRY/BIOCHEMISTRY

The Medicinal Chemistry/Biochemistry Division of the School of Pharmacy, University of Wisconsin-Madison, invites applications for a tenure-track position to begin between July 1 and August 1, 1996. The position is likely to be filled at the ASSISTANT PROFESSOR level but outstanding candidates at the Associate Professor level will be considered. A Ph.D. degree in organic chemistry, medicinal chemistry or biochemistry, postdoctoral research experience, and outstanding research potential are required. Applicants who would establish an independent chemistry-based research program in one of the following areas—modulation of receptor or gene function by small molecules with a potential for development into new types of drug therapy; chemical approaches to structure/function studies of drug receptors or other macromolecular targets; synthesis and evaluation of novel macromolecular ligands with potential in therapy; or novel approaches to combating drug resistance—are preferred but all outstanding candidates will be considered. Teaching duties will be in the current undergraduate Medicinal Chemistry courses offered by the divisional faculty and in a graduate course to be devised by the new faculty member.

Applications will be accepted until October 15, 1995. Please send a cover letter including a statement of research and teaching interests, curriculum vitae, selected reprints and the names, addresses, and telephone or Email numbers of three references to: Prof. D. H. Rich, Search Committee, School of Pharmacy, University of Wisconsin, 425 North Charter Street, Madison, WI 53706. Telephone: 608-263-2499; Email: [drhich@facstaff.wisc.edu](mailto:drhich@facstaff.wisc.edu). Unless confidentiality is requested in writing, information regarding the applicants must be released upon request. Finalists cannot be guaranteed confidentiality. *The University of Wisconsin-Madison is an Equal Opportunity Employer.*

### BIOLOGICAL OCEANOGRAPHER

The Department of Biology, San Francisco State University, invites applications for a tenure-track position at the ASSISTANT/ASSOCIATE PROFESSOR level for fall 1996. We seek a biological oceanographer who studies aspects of water-column ecology in coastal or estuarine environments. Teaching responsibilities will include an upper-division course in biological oceanography or aquatic ecology, a graduate course in an area of specialty, and participation in the general ecology program. Ph.D. is required and postdoctoral experience is desirable. Candidates must have a commitment to excellence in teaching, an established research record and the potential for extramural funding of a research program that includes supervision of M.A. students. The Department has a faculty of 34 with active groups in marine biology, ecology, systematics, conservation, microbiology, cell and molecular biology and physiology. San Francisco State University operates the Tiburon Center for Environmental Studies on San Francisco Bay and is associated with the Moss Landing Marine Laboratories. Send curriculum vitae, statement of teaching interests and research goals and three letters of reference by 1 October 1995 to: Chair, Oceanography Hiring Committee, Department of Biology, San Francisco State University, San Francisco, CA 94132. Women, ethnic minorities and persons with disabilities are especially urged to apply. *San Francisco State University is an Equal Opportunity/Affirmative Action Employer.*

### HARVARD UNIVERSITY ASSISTANT PROFESSOR Molecular and Cellular Biology (MCB)

The Department of Molecular and Cellular Biology intends to make an ASSISTANT PROFESSOR appointment (entry level) available starting September 1996. Our department covers a broad range of topics in molecular biology, cellular biology, developmental biology, structural biology, neurobiology, and molecular genetics. We are seeking outstanding candidates. We strongly encourage applications from women and minority groups. Applications should include a curriculum vitae, reprints of publications, and a statement of present and future research plans (one to three pages). Complete applications and three letters of recommendation, solicited by the applicant, should be received no later than October 1, 1995, by: MCB Search Committee, Harvard University, 7 Divinity Avenue, Cambridge, MA 02138. Telephone: 617-495-2327. *Harvard University is an Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### MOLECULAR BIOLOGIST OR MOLECULAR GENETICIST

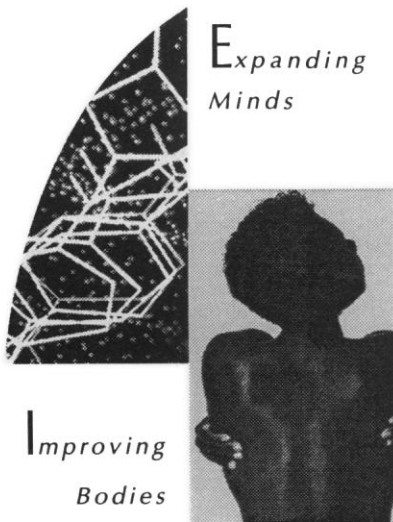
A tenure-track (ASSISTANT or ASSOCIATE PROFESSOR) position is available for a broadly trained Ph.D. with demonstrated expertise in recombinant DNA methodologies and molecular genetic analyses in eukaryotes. While the specific area of research is open, the development of an independent research program focused on a poultry species is required. Two or more years of relevant postdoctoral experience is desirable. Applicants at the Associate Professor level must have an established research program with evidence of external research support. The successful applicant will be expected to actively participate in the training of graduate and undergraduate students. Candidates should submit a letter of application, current curriculum vitae with bibliography, transcripts, statement of proposed research, statement of graduate and undergraduate education philosophy, and three letters of reference. Review of applications will begin October 15, 1995, and continue until a suitable applicant is identified. For information contact: John Kirby, Ph.D., at 501-575-8623 or Email at [jkirby@comp.uark.edu](mailto:jkirby@comp.uark.edu). All materials should be sent to:

Molecular Biology/Molecular Genetics  
Search Committee  
c/o Dr. James Denton, Head  
Department of Poultry Science, Room 0114  
University of Arkansas  
Fayetteville, AR 72701

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**ASSISTANT PROFESSOR (Ecologist).** The Biology/Microbiology Department at South Dakota State University invites applicants for a tenure-track, nine-month, 100% Academic Programs funded appointment with research expectations. Instructional responsibilities include introductory biology and development of upper-level undergraduate and graduate courses in ecosystem or population ecology and modeling. Development of a collaborative research program and pursuit of extramural funding expected. Earned Ph.D. in ecology or closely related area with emphasis in ecosystem or population ecology; background in ecological modeling; collegiate teaching experience; demonstrated effective interpersonal and communication (verbal and written) skills; and minimum of one year of postdoctoral research experience required. Preference given to candidates with demonstrated effectiveness in teaching; high productivity in research; and potential and desire for developing collaborative teaching and research programs. Send letter of application, curriculum vitae, separate statements of teaching and research interests, documentation of qualifications related to the position's expectations and have three current letters of professional reference sent to: Dr. Gary Larson, Department of Biology and Microbiology, South Dakota State University, Box 2207B, Brookings, SD 57007. Telephone: 605-688-6141. Call or write for additional information. Review of applications will start October 1, 1995, and the position will remain open until filled. Starting date is negotiable. *Affirmative Action/Equal Employment Opportunity Employer/ADA reasonable accommodations 605-688-6361 (T/Voice 605-688-4394).*

**Microbial Pathogenesis/Microbiology.** The Department of Microbiology and Immunology at the Uniformed Services University of the Health Sciences (USUHS) invites applications for a tenure-track ASSISTANT PROFESSOR position. Review of applications will begin September 1995 and continue until November 1, 1995. Position is available January 1996. Doctoral degree and postdoctoral research experience in molecular mechanisms of bacterial pathogenesis are required. Responsibilities include development of a productive research program in bacterial pathogenesis plus team teaching in departmental medical and graduate courses. Research facilities, start-up support, and environment for professional development are excellent. Salary is for a full time, 12-month appointment. Submit curriculum vitae and bibliography, a one-to-two page description of proposed research program, and names of three professional references to: Alison D. O'Brien, Ph.D., Chair, Search Committee, c/o Civilian Human Resources (CHR), Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, MD 20814-4799. Telephone: 301-295-3400; FAX: 301-295-3773. Foreign nationals will only be considered if qualified U.S. citizens are not available. *USUHS is an Equal Opportunity/Affirmative Action Employer.*



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## POSITIONS OPEN

### ASSISTANT PROFESSOR Vegetable Crop Extension/Research

The Department of Horticulture at the University of Wisconsin-Madison invites applications for an ASSISTANT PROFESSOR position supporting the potato and processing vegetable industries. The position is 80% Extension/20% Research (12 month appointment). The incumbent will provide statewide leadership in Extension programs serving potato and processing vegetable production. Research responsibilities include applied research in potato and processing vegetable production systems that are profitable and environmentally responsible, especially in sensitive areas. Continued development of modules for integrated crop management software currently in production is expected. Some germ-plasm evaluation is likely. Applicants should have completed a Ph.D. in horticulture or a related field. Postgraduate work and experience with potatoes or processing vegetable crops is desirable. Applications received by October 31, 1995, will be assured consideration. Applicants should send their curriculum vitae, a statement of professional goals, transcripts, and three letters of recommendation to: Dr. T. R. Roper, Search Committee Chair, Department of Horticulture, University of Wisconsin-Madison, 1575 Linden Drive, Madison, WI 53706-1590. Telephone: 608-262-9751; FAX: 608-262-4743; Email: trroper@facstaff.wisc.edu. Names, titles and addresses of applicants and nominees cannot be kept confidential. The University of Wisconsin-Madison is an Affirmative Action/Equal Opportunity Employer and encourages women and minorities to apply.

**ASSISTANT PROFESSOR of Microbiology:** The University of Idaho is seeking to fill a tenure-track Assistant Professor position. We are interested in candidates capable of establishing a nationally competitive research program in either i) basic microbial genetics, or ii) the use of microbial genetics to address related research areas in the department which include host-parasite interactions, plant molecular biology and biochemistry, plant/fungal development, and environmental microbiology. The successful candidate must have a strong commitment to teaching excellence and will be responsible for a one semester undergraduate lecture/laboratory course in basic microbial genetics to be taught each year and a graduate level course in his/her area of expertise in alternate years. Applicants should have a Ph.D. in Microbiology, Genetics, Biochemistry or a related field and relevant postdoctoral research experience. Send curriculum vitae, statement of research interests and three letters of reference by September 15, 1995, to: Dr. Greg Bohach, Search Committee Chair, Department of Microbiology, Molecular Biology and Biochemistry, University of Idaho, Moscow, ID 83844-3052. FAX: 208-885-6518. Affirmative Action/Equal Opportunity Employer.

### ASSISTANT/ASSOCIATE PROFESSOR REPRODUCTIVE ENDOCRINOLOGIST

Position available for Board-eligible/certified reproductive endocrinologist. Individual should be able to perform *in vitro* fertilization and should be willing to spend significant portion of time working in an already established IVF program. Additional duties include resident medical student teaching, participation in clinical research and submission of federal research grant applications. Application deadline: September 30, 1995. Please submit letter of application and curriculum vitae to: Harvey L. Ikner, Executive Administrator, UAB Department of Obstetrics and Gynecology, 301 South 20th Street, Liberty National 613, Birmingham, AL 35233. The University of Alabama at Birmingham is an Affirmative Action/Equal Opportunity Employer.

### RESEARCH ASSISTANT PROFESSORS

Two positions available immediately. Very competitive salary for highly qualified applicants. 1. Mechanistic studies of thymidylate synthases using site-directed mutagenesis, steady-state and stopped-flow kinetics (Zapf et al., *Biochemistry*, 32:9274, 1993). 2. Bioincorporation of seleno- and telluromethionine into proteins, characterization, especially by 2D NMR (Boles et al., *J. Biol. Chem.*, 267:22217, 1992). Seeking highly motivated individuals interested in co-directing research groups. Send résumé and three recommendations to: Professor R. Bruce Dunlap, Chair, Department of Chemistry and Biochemistry, University of South Carolina, Columbia, SC 29208. The University of South Carolina is an Affirmative Action/Equal Opportunity Employer.

## POSITIONS OPEN

### ASSISTANT PROFESSOR

The University of Pittsburgh Cancer Institute and the University of Pittsburgh School of Medicine, Department of Molecular Genetics and Biochemistry, are seeking a candidate for an ASSISTANT PROFESSOR (tenure stream) position in molecular biology of cancer cells, including the study of molecular genetics, oncogenes, tumor suppressor genes, control of apoptosis and molecular regulation of tumor invasiveness and cancer metastases. Emphasis will be placed on candidates whose programs are focused on the translation of basic research findings to clinical applicability. Successful candidates will join elements of an established and expanding NCI-designated, comprehensive cancer center housed in state-of-the-art biomedical science tower. New faculty members are expected to develop an extramurally funded research program. Successful applicants will be provided with laboratory and office facilities and a competitive start-up and compensation package. Applicants should submit a curriculum vitae, a description of future research plans and the names of three (3) references to: Dr. Joseph C. Glorioso, Professor and Chairman, Department of Molecular Genetics and Biochemistry, University of Pittsburgh School of Medicine, E1240 Biomedical Science Tower, Pittsburgh, PA 15261. The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.

### CELL/MOLECULAR BIOLOGIST ASSISTANT PROFESSOR

Qualifications: A Ph.D. is required. The small diversified department which places an emphasis on teaching seeks a TENURE-TRACK PERSON to teach molecular and cell biology plus introduction to biology of animals. However, development of a research program and university service is expected. Salary competitive.

Application Procedure: The position will start January 9, 1996. Send résumé, transcripts, statements of research and teaching interests and three current letters of recommendation to: Cell/Molecular Search Committee, Personnel Department-Station No. 21, Eastern New Mexico University, Portales, NM 88130. For additional information call: 505-562-2478.

Application Deadline: Applications will be accepted until the position is filled. Screening to begin on September 18, 1995. Applicants are encouraged to submit materials as soon as possible. Affirmative Action/Equal Opportunity Employer.

### YALE UNIVERSITY DEPARTMENT OF CHEMISTRY

The Department of Chemistry, Yale University, invites applications for a position at the ASSISTANT PROFESSOR level to commence fall 1996. We seek creative teacher-scholars who show promise for developing outstanding research programs in the broad field of organic chemistry. Applicants should send curriculum vitae and a statement of research plans and arrange for the submission of three letters of recommendation. All materials should be received by 31 October 1995. Send applications to: Professor Alanna Schepartz, Chair, Organic Chemistry Search Committee, P.O. Box 208107, Yale University, New Haven, CT 06520-8107. Yale University is an Equal Opportunity/Affirmative Action Employer.

The University of Vermont College of Medicine is seeking both candidates and nominations for the position of PROFESSOR and CHAIR of the Department of Pharmacology. Current strengths of the Department exist in studies at the tissue, cellular and molecular level in the areas of vascular biology, cancer biology, and ion channels research. Ph.D., M.D. or equivalent degree is required. Candidates should have a demonstrated record of: leadership, excellence in teaching, and productivity in research.

Applications will be accepted until the position is filled. Review of the candidates will begin by September 15, 1995. Curriculum vitae and a letter of interest should be sent to:

Edwin G. Bovill, M.D.

Chair, Department of Pharmacology Search Committee  
Chair, Department of Pathology  
University of Vermont College of Medicine  
E-109 Given Building  
Burlington, VT 05405

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.

## POSITIONS OPEN

### DIRECTOR OF MACROMOLECULAR RESOURCES

Colorado State University seeks applications for a non-tenure-track position as RESEARCH ASSOCIATE/DIRECTOR of Macromolecular Resources. The facility is equipped with over \$1 million in state-of-the-art instrumentation for the synthesis, sequencing and analysis of DNA templates, oligonucleotides, peptides and proteins. It is currently staffed with six full-time research associates and four part-time student employees. Candidates must have a B.S. or more advanced degree, experience in synthesis and analysis of macromolecules, and strong administrative and marketing skills. Complete applications consisting of a curriculum vitae, a statement of interests and three reference letters must be received by September 30, 1995. Send to: Dr. N. P. Curthoys, Department of Biochemistry and Molecular Biology, Colorado State University, Ft. Collins, CO 80523. Colorado State University is an Equal Employment Opportunity/Affirmative Action Employer/Employment Opportunity Office: 21 Spence Hall.

### UNION OF CONCERNED SCIENTISTS Director of Global Resources Program

The Union of Concerned Scientists (UCS) is seeking a DIRECTOR for one of its four program areas. The Global Resources Program seeks to stimulate the scientific community and the public to take action to address the interconnected issues of global environmental degradation, population growth, development, and consumption. The director will supervise staff working on UCS's Sound Science Initiative and with the National Religious Partnership for the Environment. (S)he will also serve as liaison to scientific societies and work on special projects. Qualifications: Broad understanding of global environmental issues. Ph.D. Ability to relate well to senior scientists in a variety of disciplines. Strong management and communications skills. Five to eight years of experience in scientific or public policy work. For more information, contact: UCS, 2 Brattle Square, Cambridge, MA 02238. Telephone: 617-547-5552; Email: wlcon@ucsusa.org. Apply by September 8, 1995. UCS is an Equal Opportunity Employer continually seeking to diversify its staff.

### ASSOCIATE BIOLOGY PROFESSOR AND DEPARTMENT CHAIR Hamline University, St. Paul, MN

Hamline University seeks excellent teacher/scholar for biology CHAIR. Responsibilities include coordinating ongoing departmental curricular revision, pursuing interdisciplinary connections on campus, leading efforts to expand the role of sciences in undergraduate general education. Successful candidate will bring curriculum development experience, ability to get funding for undergraduate research program in molecular biology. Substantial institutional support exists for this position. For application instructions, contact: Associate Dean of the College, Garvin Davenport, gdavenport@piper.hamline.edu. Affirmative Action/Equal Opportunity Employer. Women and minorities encouraged to apply.

The Department of Microbiology and Immunology, Uniformed Services University of the Health Sciences (USUHS) with Ph.D. graduate education program wishes to fill two TENURE-TRACK POSITIONS in the area of animal virology with preference in viral pathogenesis at the assistant and/or associate professor levels. Hard money salary, excellent research facilities, and start-up support. Doctoral degree and postdoctoral research experience in virology or related field are required. Candidates for Associate Professor must have demonstrated research productivity and current research funding. Responsibilities include: developing an independently funded research program in virology, participating in professional and graduate student teaching, and training pre- and postdoctoral scientists. Submit curriculum vitae, letter describing research and teaching interests and career objectives, and the names and addresses of three professional references to: Henry C. Wu, M.D., Ph.D., Professor and Chair of Microbiology and Immunology, c/o Civilian Human Resources (CHR), Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, MD 20814-4799. Telephone: 301-295-3400; FAX: 301-295-3773. Foreign nationals will only be considered if qualified U.S. citizens are not available. USUHS is an Equal Opportunity/Affirmative Action Employer.

# IN IT FOR LIFE

*Improving life, by advancing science.*

Since opening our doors back in 1980, Genetics Institute has discovered a prodigious number of novel regulatory proteins. To date, nine of these have advanced to human clinical evaluation or commercialization, and the outlook for continued innovation is unprecedented.

Our success as the largest biotechnology employer in Massachusetts has been fueled by our collaborative work environment driven by values and focused on the future. This culture attracts and inspires some of the brightest minds whose ideas sustain us as a leader in the industry.

Our New England location places us in a hub for the biotechnology industry. The Boston area offers nearby mountains, seacoast, and a four-season climate providing endless recreational, cultural and educational opportunities.

So when you consider why you chose the sciences, consider Genetics Institute. Make an impact.

## Gene Expression Monitoring Staff Scientist

We have a PhD opening, the primary responsibilities for which to include the development and application of DNA chip technology for gene expression monitoring, with a focus on identifying and characterizing factors that influence the cellular immune response. This effort will include developing molecular biology protocols for the quantitative amplification and low-level detection of mRNAs with the DNA chip, development of databases to store and query data from the chip, and identification/development of cell-based assays to be used in conjunction with the DNA chip.

Qualifications should include completion of a postdoctoral fellowship in immunology or related field, with demonstrated expertise in a wide range of molecular biology techniques, and a track record of applying these skills creatively and independently. Substantial experience in the use of computers for solving biological problems is essential; C/C++ programming experience is a plus. The ability to interact effectively with a broad group of scientists and extramural collaborators is essential. **Job Code 95-C501**

## Small Molecule Drug Discovery

We are strengthening our drug discovery efforts through the expansion of our Medicinal Chemistry group. We have opportunities for candidates with experience in synthetic organic chemistry to join our multidisciplinary team in the search for novel anti-inflammatory compounds. We are seeking individuals that thrive on interactions with a Multidisciplinary team of Cell/Molecular Biologists, Biochemists, High throughput robotized screening, Protein Structure (NMR and X-ray crystallography) and Molecular Modeling groups. The following positions for active experimentalists are available:

### Staff Scientist

PhD in synthetic organic chemistry. Experience in computational chemistry is desirable. Successful candidates should have ability to work independently in a research environment. A good publication record is a must. **Job Code 95-C576P**

### Research Staff

MS with a minimum of 2 years research experience in synthetic organic chemistry. **Job Code 95-C576M**

For consideration, please send or fax resume (suitable for scanning into our database), to: Human Resources Department, Genetics Institute, Inc., One Burt Road, Andover, MA 01810. Fax: (508) 623-2607.

Genetics Institute offers competitive salaries and benefits, including comprehensive health care, dental and life insurance, three weeks' paid vacation, 401(k) stock purchase plan, relocation assistance, tuition assistance, and an on-site exercise facility. Genetics Institute is dedicated to building strength through diversity.



*Harnessing the Body's Power to Heal™*

# Discover A Unique Approach

*at Amgen Boulder*

Amgen is the world leader in developing and delivering innovative, cost-effective therapeutics based on advances in cellular and molecular biology. Our research environment emphasizes collaboration, intellectual honesty, scientific integrity, and a diverse and supportive culture.

We currently have the following opportunities available for Ph.D. level Research Scientists and BS/MS level Research Associates at our **BOULDER, CO** facility.

## DRUG METABOLISM

Qualified candidates will have industry experience in the design and conduction of in vitro/in vivo metabolism studies on small molecule new drug entities, and a degree in Pharmacology, Pharmacy, Chemistry, or related field. (Job Code: OXP-SC-DM)

## MOLECULAR BIOLOGY

Qualifications include a degree in Molecular Biology or related field and experience in inflammation biology with an emphasis on gene isolation, cloning, and expression; PCR; and hybridization. Postdoctoral opportunity is also available. (Job Code: OXP-SC-MB)

## CHEMISTRY

Positions in this area require industry experience in synthetic organic chemistry applied to small molecule drug discovery in inflammation research as well as a degree in Synthetic Organic Chemistry or Chemistry. (Job Code: OXP-SC-CHEM)

We recognize that diverse perspectives are a key factor in the process of discovery.

At Amgen, you'll find our approach to scientific research as rewarding as it is effective. We offer a highly competitive compensation and benefits package. Please mail your resume/c.v. to: Amgen Boulder, Human Resources Dept., Job Code: (see above), 3200 Walnut Street, Boulder, CO 80301. Please consult our on-line Job Bulletin Board at <http://www.bio.com> for information on other career opportunities available at Amgen. Principals only, please.

EEO/AA Employer M/F/D/V

## POSITIONS OPEN

### FACULTY POSITION BACTERIAL PATHOGENESIS University of Miami School of Medicine

The Department of Microbiology and Immunology at the University of Miami School of Medicine invites applications for a tenure-track faculty position at the **ASSISTANT PROFESSOR** level. An individual utilizing a molecular approach to study any aspect of bacterial pathogenesis is sought. All applicants should have several years of postdoctoral experience and a commitment to establishing an externally funded independent research program. Quality research facilities, start-up funds, and salary will be provided to the appointee. Applicants should have a Ph.D., M.D., or equivalent degree. The appointee will be expected to participate in graduate and medical training programs. Interested applicants should send a curriculum vitae, a statement describing research achievements and future research goals, relevant reprints, and the names of three references to: **Bacterial Pathogenesis Search Committee, University of Miami School of Medicine, Department of Microbiology and Immunology (R-138), P.O. Box 016960, Miami, FL 33101.** The review of applications will continue until the position is filled. *The University of Miami is an Equal Opportunity/Affirmative Action Employer.*

### RESEARCH FACULTY POSITION Cardiac Electrophysiology Open Rank

The University of Utah's Nora Eccles Harrison Cardiovascular Research and Training Institute has an opening in its cardiac electrophysiology research program. Applicants must hold M.D., Ph.D., or M.D./Ph.D. degrees and have research interest and experience in whole organ and/or cellular cardiac electrophysiology. Areas of interest should include electrocardiographic mapping and electrophysiologic study of cardiac fields, ventricular depolarization and repolarization, and ventricular arrhythmias. Faculty appointment and salary will reflect experience and training. Please direct inquiries or send curriculum vitae and names of three references to: **Dr. Robert L. Lux, Director, Nora Eccles Harrison CVRTI, Building 500, University of Utah, Salt Lake City, UT 84112.** *The University of Utah is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities.*

### BAYLOR COLLEGE OF MEDICINE Faculty Position in Molecular Microbiology

The Department of Microbiology and Immunology at Baylor College of Medicine invites applications for a **TENURE-TRACK FACULTY** appointment. All research interests will be considered, but preference will be given to individuals studying Gram positive bacteria or mycobacteria, with a focus on all aspects of pathogenesis or biochemistry. The successful candidate will be expected to develop an independent program based upon extramural support. Rank will be dependent upon qualifications. Please send curriculum vitae, summary of research interests and names of at least three references to: **Dr. Richard Hull, Department of Microbiology and Immunology, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030.** Applications will be accepted until December 1, 1995. *Baylor College of Medicine is an Equal Opportunity/Affirmative Action Employer. Women and members of minority groups are strongly encouraged to apply.*

**PHYSIOLOGICAL PSYCHOLOGIST.** The Psychology Department at Amherst College invites applications for a visiting position in physiological psychology, rank open, beginning in January or July of 1996 and extending through June of 1999. This position may be continued, and it may become tenure track. Responsibilities include teaching Physiological with a lab or two other courses (introductory, intermediate, or advanced specialty courses) each semester, directing senior theses, academic advising, and participating in the College's Neuroscience Program. The successful candidate will be expected to pursue an active research program; start-up funds will be available. Completed applications should include curriculum vitae, statement of research and teaching interests, sample publications, and three letters of reference. Review of applications will begin October 1, 1995. Send to: **Chair of the Physiological Search Committee, Department of Psychology, Campus Box 2236, Amherst College, Amherst, MA 01002.** *Affirmative Action/ADA/Equal Opportunity Employer.*

## POSITIONS OPEN

### ASSISTANT PROFESSOR AND DIRECTOR Otolaryngology Laser Research Laboratory

The Department of Otolaryngology at Tufts University School of Medicine and New England Medical Center Hospital, Boston, Massachusetts, is seeking a candidate for a **FACULTY POSITION** in the Laser Research Laboratory. Research experience and a special interest in optics and computerized imaging is desirable. A Ph.D. is required, preferably in biomedical engineering, although candidates with varied experimental backgrounds will be considered. This facility is dedicated to the development of noninvasive surgical technology in the treatment of diseases of the head and neck. Current programs include research in advanced applications using lasers, fiberoptics, computerized imaging and virtual reality. The successful applicant will direct the research activities of an active and innovative otolaryngology faculty. Applicants should send a curriculum vitae, a brief description of current research and three letters of recommendation to: **Stanley M. Shapshay, M.D., Professor and Chairman, Department of Otolaryngology, New England Medical Center, 750 Washington Street, Box 850, Boston, MA 02111.** *Tufts University and New England Medical Center are Equal Opportunity/Affirmative Action Employers.*

Massachusetts Institute of Technology, Department of Mechanical Engineering, invites applications for a **TENURE-TRACK FACULTY** position at a junior faculty level. Applicants should hold a doctorate in Mechanical Engineering or a related field, and have a strong interest in teaching and research in the area of Tribology or Manufacturing. The candidate should preferably have both experimental and theoretical research experience. Applicants should send a résumé (with citizenship and/or visa status), a two-page statement of current and future research and teaching interests, and the names and addresses of at least five references, to: **Tribology and Manufacturing Search Committee, Room 3-173, Department of Mechanical Engineering, Massachusetts Institute of Technology, 77 Massachusetts Avenue, Cambridge, MA 02139-4307.** Résumés received by October 15, 1995, will be given full consideration. *MIT is an Equal Employment Opportunity/Affirmative Action Employer. Women and members of minority groups are strongly urged to apply.*

**FACULTY POSITION:** Starting in January 1996 in the Department of Periodontics, College of Dentistry, University of Illinois at Chicago. Candidates must have extensive training in research related to oral microbiology or oral biology. A Ph.D. degree is essential. Applicants are expected to compete successfully for extramural funding. Submit curriculum vitae and a summary of research interests before September 30, 1995, to: **Dr. S. Mukherjee, Head, Department of Periodontics, University of Illinois at Chicago, 801 South Paulina Street, Chicago, IL 60612-7212.**

*The University of Illinois at Chicago is an Equal Opportunity/Affirmative Action Employer. Minority candidates are encouraged to apply.*

### POSTDOCTORAL FELLOW POSITION

An NIH-funded **POSTDOCTORAL FELLOW** position is available for up to four years to conduct basic studies on the mechanism of action of dicationic molecules with activity against several opportunistic pathogens. Ph.D. degree in biochemistry/molecular biology is required. A strong background in enzymology, molecular biology or genetics, and experience with DNA-dependent enzymes is required. The minimum starting salary is \$25,200 plus benefits. Please send curriculum vitae and names of three references to: **Dr. Christine C. Dykstra, Department of Pathobiology, 264 Greene Hall, Auburn University, AL 36849-5519.**

*Auburn University is an Affirmative Action/Equal Employment Opportunity Employer. Minorities and women are encouraged to apply.*

**POSTDOCTORAL POSITION** available immediately to investigate mechanisms regulating cellular proliferation. Specific areas of study include 1) signaling through the transforming growth factor beta receptors; and 2) cell cycle control of AIDS-related eukaryotic pathogens. Send curriculum vitae and names of three references to: **Edward B. Leof, Ph.D., Guggenheim 642C, Mayo Clinic, Rochester, MN 55905.** Telephone: 507-284-5717; FAX: 507-284-4521; Email: [leof@mayo.edu](mailto:leof@mayo.edu). *Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.*

## POSITIONS OPEN

### POSTDOCTORAL FELLOWSHIP Endogenous Opiate Systems in Drug Abuse

The Neuroimaging and Drug Action Section at the National Institute on Drug Abuse has an immediate opening for a **POSTDOCTORAL FELLOW** (Intramural Research Training Award) to study the modulation of endogenous opiate systems by chronic drug abuse. The candidate must be a U.S. citizen or permanent resident and have a Ph.D. or M.D. and less than five years of postdoctoral experience. The research will involve *in vivo* mapping of biochemical processes in brain in non-human animal models. Knowledge of pharmacology, physiology and neuroanatomy is highly desirable. Salary is contingent upon number of years of postdoctoral experience. Applicant should send a current curriculum vitae and a letter discussing research interests and experience to: **Elythe D. London, Ph.D., Chief, Neuroimaging and Drug Action Section, National Institute on Drug Abuse, P.O. Box 1580, Baltimore, MD 21224.** *The National Institute on Drug Abuse is an Equal Opportunity Employer. Women and other minorities are encouraged to apply.*

**POSTDOCTORAL POSITION:** Available at the Weis Center for Research in the laboratory of **Dr. William Maltese.** Studies focus on structure-function analysis of Rab GTP-binding proteins and the roles of specific Rab proteins in intracellular trafficking of Alzheimer's amyloid precursor protein. The Weis Center is a basic research institute located in an attractive rural environment. Starting date is flexible and salary depends on experience. Ph.D. in protein biochemistry, cell biology, or molecular biology is preferred. If interested please provide curriculum vitae, statement of interests and names of three references to: **Geisinger Human Resources (WM), 100 North Academy Avenue, Danville, PA 17822-1529.** *Equal Opportunity Employer. Minority/Female/Disabled/Veteran.*

### POSTDOCTORAL POSITION

An immediate opening is available to study molecular and cellular pathogenesis for Alzheimer's disease. The focus of the research is the investigation of mechanisms responsible for isoform specific effects of apolipoprotein E on neurite outgrowth and neuronal survival. Experience in molecular and cellular biology is desirable. FAX curriculum vitae and names of three references to: **314-454-2685. Dr. Guojun Bu, Washington University School of Medicine, Box 8116, St. Louis, MO 63110.** *An Equal Opportunity/Affirmative Action Employer/Minority/Female/Disabled/Veteran.*

### POSTDOCTORAL POSITION Catalytic RNA/RNA Splicing

**POSTDOCTORAL POSITION** available immediately to study RNA splicing by group I introns and RNP complexes (*EMBO J*, 12:3599, 1993). Ph.D. in biochemistry or molecular biology required. Strong nucleic acids background desirable. Send curriculum vitae, names of three references, and a letter describing research skills and interests to: **John M. Burke, University of Vermont, Microbiology & Molecular Genetics, 306 Stafford Hall, Burlington, VT 05405.** Email: [jburke@moose.uvm.edu](mailto:jburke@moose.uvm.edu).

**POSTDOCTORAL RESEARCH AFFILIATE** position is available at the USDA, ARS, Beltsville Agricultural Research Center to study the mechanism of synthesis and role of  $\beta$ -glucans in plant-microbe interactions concentrating on the soybean symbiosis with *Bradyrhizobium*. Training in purification of membrane proteins and microbial genetics is desired. Appointment for one year (renewable) at GS-9 (\$29,898). Send résumé to: **Dr. Donald L. Keister, USDA, ARS, SARL, Building 011, HH-19, BARC-W., Beltsville, MD 20705.** Telephone: 301-504-5723. *USDA is an Equal Opportunity Employer.*

A **POSTDOCTORAL POSITION** is available September 15, 1995, to study immune responses of two MHC-congenic lines of chickens to *Salmonella enteritidis*. A recent Ph.D. with cellular immunology background (cell culture, FACS), and an enthusiastic nature are required. Send curriculum vitae and names of three references along with telephone and FAX numbers to: **Dr. Linda H. Keller, Laboratory of Avian Medicine & Pathology, New Bolton Center, 382 West Street Road, Kennett Square, PA 19348-1692.** *Equal Opportunity/Affirmative Action Employer. We encourage minority and women candidates.*



## **First Announcement**

# **SYMPOSIUM ON GENOMIC MEDICINE**

**DECEMBER 6-7, 1995  
ROCKVILLE, MARYLAND**

In celebration of the opening of its new campus, **The Institute for Genomic Research (TIGR)** and the **TIGR Science Education Foundation, Inc.** will cosponsor a symposium with the **Applied Biosystems Division of Perkin Elmer Corporation** devoted to four major topics:

Microbiological Genomes  
Human Genome Mapping  
Genetic Diseases  
Ethical Impact

### **Scheduled speakers include:**

W. French Anderson • Paul Billings • Daniel Cohen • Neal Copeland • David Cox • Michael Czech • Andre Goffeau • Stephen J. Gould • John Hardy • Michael W. Hunkapiller • Kenneth Kinsler • Brad Margus • Richard Moxon • Philip Reilly • David Schlessinger • Mel Simon • Chris Somerville • Craig Venter • Ray White • James Wilson

*For registration information contact  
the Conference Office at:*

**Through September 8:** 932 Clopper Road, Gaithersburg, MD 20878  
301-216-9567 • 301-977-7233 FAX • seqconf@tigr.org (Internet)

**After September 8:** 9712 Medical Center Drive, Rockville, MD 20850 • 301-838-3509 • 301-838-0229 FAX • seqconf@tigr.org (Internet)

## **NATIONAL INSTITUTES OF HEALTH**

### **DIRECTOR, DIVISION OF RESEARCH GRANTS**

The National Institutes of Health (NIH) invites applications for the position of Director, Division of Research Grants (DRG). This is a Civil Service position in the Senior Executive Service (SES), with a salary ranging from ES-1 to ES-6 level per annum (currently \$97,991 to \$122,040, including a locality allowance). Physicians may be eligible for a comparability allowance of up to \$20,000 per year. A recruitment bonus of up to 25% of base pay may be available to a non-Federal candidate selected for this position, subject to individual approval. A relocation bonus of up to 25% of base pay may be available to a permanent Federal employee who must relocate to accept this position, subject to individual approval. A one-year probationary period must be served by the individual selected if not currently in the career SES.

The incumbent serves as a principal advisor to the Director, NIH, and participates in discussions relative to the development of major policy decisions affecting the research grant and review program of the PHS; directs the search for qualified individuals to serve as members of initial review groups; participates in interagency discussions on the principal problems of Federal granting agencies, and meets with private research agencies to address shared issues relating to review; assures that effective administrative procedures are established so that program operations and obligations of government funds and other resources are rendered consistent with statutory and regulatory requirements and within limitations imposed; works closely with the Peer Review to assess broad policy issues related to the scientific review of research grants; provides leadership Oversight Groups in developing the scientific and administrative skills for Senior Research Administrators; and ensures smooth interface between program goals of Institutes and the Divisions review policies and procedures of the DRG.

The vacancy announcement with mandatory and desirable qualifications requirements can be obtained by calling (301) 496-1443. Applicants are required to submit a Bibliography, and either a Curriculum Vitae, Application for Federal Employment (SF-171), Optional Application for Federal Employment (OF-612), Resume, or any other written format which addresses the requirements indicated in this announcement, to the following address:

**NATIONAL INSTITUTES OF HEALTH  
Division of Senior Systems  
6120 Executive Blvd, Ste 100  
Rockville, Maryland 20852  
Attention: Janice Balin**



*Applications must be postmarked no later than  
November 1, 1995*

- Applicants with access to E-Mail may transmit their materials to the following E-Mail address: fewalker@helix.NIH.gov
- Applicants with access to the Internet's World Wide Web may wish to browse the NIH Home Page, and may apply through the Web at the following URL: <http://www.nih.gov/news/>
- Application materials may be FAXed to (301) 402-6139 (Please limit FAXed materials to no more than 10 pages)

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, political affiliation, marital status, sexual orientation, handicapping condition, age or membership or non-membership in an employee organization.

NIH is an Equal Opportunity Employer

## POSITIONS OPEN

### POSTDOCTORAL SCIENTIST Zürich, Switzerland

This project explores HIV latency by measuring various HIV mRNAs in tissues obtained from HIV-infected individuals. The position demands creative molecular biology with an emphasis on *in situ* hybridization. Preferred qualifications: three years of experience, expertise in virology, and proficiency with *in situ* hybridization. This is a two year position, beginning October 1, 1995. Approximate salary: Sfr. 78,000/year (US\$69,000). Send curriculum vitae and three references to: Dr. Richard Cone, Division of Infectious Diseases, Department of Medicine, University Hospital, Zürich, Rämistrasse 100, CH-8091 Zürich, Switzerland. Telephone: +41-1-255-3775; FAX: +41-1-255-3291; Email: infconer@usz.unizh.ch.

### TWO NEUROBIOLOGY LABS MOVING Ambitious Postdoctorals Wanted

Positions available in Program Project Grant to study molecular/cellular basis of taste transduction in new labs at University of Miami School of Medicine. Seeking experienced Ph.D.'s: molecular biologist, immunocytochemist, patch-clamp electrophysiologist. Applications (curriculum vitae, experience, three references) to: Dr. Nirupa Chaudhari or Dr. Stephen Roper, Department of Physiology and Biophysics (R430), P.O. Box 016430, University of Miami School of Medicine, Miami, FL 33101. Inquiries: nchaudhari@vines.colostate.edu; telephone: 303-491-7286; or roper@lamar.colostate.edu; telephone: 303-491-7808.

A POSTDOCTORAL POSITION is available immediately to study the regulation of steroid receptors and other signaling proteins by components of the molecular chaperone machinery. Molecular and cellular approaches will be used: 1) to examine interactions in various multiprotein complexes consisting of major heat shock proteins, immunophilins, and novel co-chaperones and 2) to study the influence of these complexes on signal transduction. Send curriculum vitae and names of three references to: Dr. David F. Smith, Department of Pharmacology, University of Nebraska Medical Center, Omaha, NE 68198-6260. FAX: 402-559-7495. The University of Nebraska Medical Center is an Equal Opportunity/Affirmative Action Employer.

### POSTDOCTORAL POSITION UC SAN FRANCISCO

An immediate opening is available to study hematopoietic defects in mice bearing HOX homeobox deletions. Experience in marrow culture, murine transplantation, molecular biology is desirable.

Send applications to: Dr. H. J. Lawrence, Hematology Research (151H), VA Medical Center, 4150 Clement Street, San Francisco, CA 94121. FAX: 415-221-4262. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available at the Uniformed Services University of the Health Sciences, Bethesda, Maryland, to study the molecular mechanisms of HIV neutralization escape mutations and their significance for vaccine development. Interested individuals should send names of references, résumés, and cover letter to: Human Resources Department HMJF, Attn: P12950174, 1401 Rockville Pike, Suite 600, Rockville, MD 20852. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study signal transduction through receptors for tumor necrosis factor and vascular endothelial cell growth factor. Experience in molecular biology and use of the two-hybrid system helpful. Send curriculum vitae and names and telephone numbers of three references to: Dr. David B. Donner, Indiana University School of Medicine, Walther Oncology Center, 975 West Walnut Street, IB 501, Indianapolis, IN 46202. FAX: 317-274-3318.

POSTDOCTORAL POSITIONS available to study leukocyte motility in the nervous system. Application should include a brief, specific description of the basis for your interest, relevant experience, when you would like to start (start time is flexible), and fellowships for which you are eligible. Reply to: Dr. L. Lampson, Laboratory of CNS Immunology and Tumor Biology, Center for Neurologic Diseases/LMRC 116, Brigham and Women's Hospital, Boston, MA 02115.

## POSITIONS OPEN

### POSTDOCTORAL POSITIONS

Two positions are available at the Center for Tropical Diseases, Department of Pathology, University of Texas Medical Branch, Galveston, TX 77555-0609. The first is to study molecular interactions between arthropod-borne viruses and their mosquito vectors; applicants should have a Ph.D. or equivalent degree with training in molecular biology, virology and/or vector biology. The second position is to work in the Amazon region of Peru in a surveillance program for new and emerging viruses. Applicants should have a Ph.D. or equivalent degree in biology, microbiology, entomology or parasitology; previous field experience in Latin America and knowledge of Spanish are desirable. Applicants should send (or FAX: 409-747-2415) a description of their research experience and interests, a curriculum vitae, and names of three references to: Dr. Scott C. Weaver (first position) or Dr. Robert B. Tesh (second position) at the address above. The University of Texas Medical Branch (UTMB) is an Equal Opportunity/Affirmative Action Employer. Minority/Female/Disabled/Veteran. UTMB is a smoke-free/drug-free work place. UTMB hires only those individuals authorized to work in the United States.

### POSTDOCTORAL SCIENTIST

Medarex, Inc., a growing biotechnology company, has an excellent opportunity for a Cellular Immunologist with a good publication record needed to examine the function of Fc receptors for IgG on human myeloid cells. Bispecific antibody technology will be applied to examine functions such as Fc receptor-directed antigen presentation and antibody-dependent cell-mediated cytotoxicity (ADCC). In addition, the successful candidate will participate in the development of unique Bispecific reagents constructed either chemically or genetically. Please send résumé to: Medarex, P.O. Box 953, Annandale, NJ 08801. Equal Opportunity Employer.

### POSTDOCTORAL POSITION G Protein Structure and Function

Position to study G proteins using biochemical, biophysical and molecular biology techniques. Applicants should have a strong background in biochemistry or molecular biology and qualify for a position on an NIH-supported Training Grant. Send curriculum vitae, a statement of research experience and career goals, and the names, addresses and telephone numbers of three references to: Dr. John Hildebrandt, Department of Pharmacology and Experimental Therapeutics, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.

RESEARCH SCIENTIST/POSTDOCTORAL FELLOW: Desire Ph.D. with experience in HIV molecular biology to be a research scientist in a laboratory-based program on the pathogenesis of HIV. Person will be involved in laboratory-based program involved in studies in humans and primates of natural history and immunology of HIV. Experience with PCR, cloning, sequencing and other molecular biologic assays with HIV essential. Contact: Lawrence Corey, M.D., University of Washington, c/o Pacific Medical Center, Mail Stop 358260, 1200 12th Avenue South, Room 9301, Seattle, WA 98144. The University of Washington is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCH positions in Pathology. Two Postdoctoral positions are available to study the mechanism of human breast cancer tumorigenesis, using genetic approaches. Recent Ph.D., M.D., or M.D./Ph.D. with background in molecular biology required. Please mail or FAX curriculum vitae, statement of research accomplishments and interests, and the names of three references to: Ramon Parsons, M.D., Ph.D., The Columbia-Presbyterian Cancer Center, Department of Pathology, Columbia University, 630 West 168th Street, New York, NY 10032. FAX: 212-305-5498.

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POSTDOCTORAL POSITION available immediately to subtype and characterize *Helicobacter* strains. *Helicobacter pylori* is a bacterium highly associated with gastroduodenal disease, including peptic ulcer disease and gastric cancer. The position requires at least two years of experience in molecular biology. Knowledge/training in microbial genetics and physiology highly desirable. Send curriculum vitae, names and telephone numbers of three references, and date available to: Mae F. Go, M.D., Baylor College of Medicine & VA Medical Center (111D), 2002 Holcombe Boulevard, Houston, TX 77030.

## POSITIONS OPEN

### POSTDOCTORAL POSITION Medical University of South Carolina Division of Endocrinology

A POSTDOCTORAL POSITION is available immediately to investigate the genetics of non-insulin-dependent diabetes mellitus. The research project will involve the identification and physical mapping of genetic markers linked to genes causing non-insulin-dependent diabetes mellitus in the Pima Indians and pre-diabetic phenotypes such as insulin resistance and obesity. Research experience in molecular genetics, molecular biology and/or cellular biology required. Candidates should send a curriculum vitae, statement of research interests and the names of three references to: Dr. Claire Allan or Dr. Timothy Garvey, Division of Endocrinology, Department of Medicine, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425. FAX: 803-792-1270; Email: allancj@musc.edu.

### POSTDOCTORAL RESEARCH ASSOCIATE Molecular Oncology

Position available immediately in a laboratory studying the molecular mechanisms of malignant transformation and developing new immuno- and antisense therapeutics. Must have a Ph.D. and documented experience with PCR, DNA, and RNA analysis and gene cloning. Knowledge of monoclonal antibodies and/or antisense therapeutics, as well as nude mice systems are highly desirable.

Please send or FAX curriculum vitae and names of three references to: Dr. Ewa M. Rakowicz-Szulczynska, Associate Professor, Director, Molecular Oncology Laboratories, Eppley Cancer Center, University of Nebraska Medical Center, 600 South 42nd Street, Omaha, NE 68198-3255. FAX: 402-559-8112.

POSTDOCTORAL POSITION available immediately for qualified individual to study the role of SCL/tal gene dysregulation in T-cell leukemia. Model systems include rat embryo fibroblast transformation assays, characterization and breeding of transgenic mice overexpressing SCL, and SCL protein-protein interaction screens. Requirements: Ph.D. degree or equivalent and substantial experience in all standard nucleic acid manipulations. Immunohistochemistry background is preferred. Applicants should have demonstrated research excellence and strong oral and written communication skills. Please send or FAX curriculum vitae and names and addresses of three references to: Dr. Peter D. Aplan, Departments of Pediatrics and Molecular Medicine, Roswell Park Cancer Institute, Elm and Carlton Streets, Buffalo, NY 14263. Telephone: 716-845-5773; FAX: 716-845-4502; Email: paplan@sc3101.med.buffalo.edu. Roswell Park Cancer Institute is a Minority/Female/Disabled/Veteran/Affirmative Action/Equal Opportunity Employer.

### POSTDOCTORAL POSITION DANA-FARBER CANCER INSTITUTE Cellular and Molecular Immunology

A POSTDOCTORAL POSITION is available immediately for a study of immunodeficiency after allogeneic bone marrow transplantation. Cellular or molecular immunology training will be helpful. Send curriculum vitae to: Dr. Ilonka J. Rimm, Dana 1710B, DFCI, 44 Binney Street, Boston, MA 02115. Telephone: 617-632-3804; FAX: 617-632-2085.

### POSTDOCTORAL POSITION UNIVERSITY OF CHICAGO

Position available to study protein-protein interactions of neurofibronin in neural embryonic cells. Candidate should have a strong background in protein biochemistry and molecular biology. Please send curriculum vitae, a summary of research interests, and three letters of recommendation to: Dr. Dimitra A. Mangoura, University of Chicago MC5058, 5841 South Maryland Avenue, Chicago, IL 60637. Email: dm36@midway.uchicago.edu.

Two funded POSTDOCTORAL POSITIONS at Harvard Medical School are available immediately to study the molecular mechanisms by which proteins and organelles are targeted to the yeast lysosome for degradation. 33 complementation groups required for this process have been identified. Future research will focus on the cloning and sequencing of the genes involved in this pathway. Send curriculum vitae and three names of references to: Dr. H. Chiang, Department of Cell Biology, 25 Shattuck Street, Boston, MA 02115.



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### POSTDOCTORAL POSITION University of Pennsylvania

**POSTDOCTORAL POSITION** available immediately to investigate the biochemical, cellular and physiological aspects of lipoxygenase enzymes. Projects include structure/function analysis, molecular modeling and work with transgenic mice. Candidates should have a strong background in biochemistry/molecular biology. Experience with mouse experimentation is preferred. Please send curriculum vitae to: **Dr. Colin D. Funk, Center for Experimental Therapeutics, 909 Stellar-Chance, University of Pennsylvania, 422 Curie Boulevard, Philadelphia, PA 19104-6100. Affirmative Action/Equal Opportunity Employer. Minority/Female/Disabled/Veteran.**

### POSTDOCTORAL POSITION HARVARD MEDICAL SCHOOL

Position available to study the neuronal function of a newly identified gene involved in Alzheimer's disease. Experience in molecular and cell biology is required. Send curriculum vitae, brief description of research experience and names of three references to: **Dr. Bruce Yankner, Children's Hospital, Enders 260, 300 Longwood Avenue, Boston, MA 02115.**

**POSTDOCTORAL POSITION** available immediately to study associating hemoglobin systems. Techniques to be used include light-scattering, ultracentrifugation, and ligand binding. A strong background in biophysical chemistry is highly desirable. Interested persons should send curriculum vitae, a brief statement of research interests, and names, addresses and telephone numbers of three references to: **Austen F. Riggs, Department of Zoology, University of Texas, Austin, TX 78731-1064. FAX: 512-471-9651; Email: riggs@uts.cc.utexas.edu.**

### POSTDOCTORAL TRAINEESHIPS

The Department of Epidemiology in the Graduate School of Public Health at the University of Pittsburgh is accepting applications for postdoctoral traineeships in the areas of: 1) women's health, 2) aging, and 3) cardiovascular disease.

Trainees will have the opportunity to earn a Master's or doctoral degree while working for up to three years on major research programs including: 1) Etiology and prevention (clinical trials) of osteoporosis, including the impact of bone density, genetics and pharmacological and non-pharmacological intervention; 2) Non-invasive methods of quantifying vascular disease, including relation to risk factors and molecular genetics and clinical trials of various pharmacological and non-pharmacological therapies; 3) Evaluation of endogenous hormones and estrogen metabolism as they impact diet, obesity, behavior and exercise during menopause; 4) Etiology and predictors of toxemia in pregnancy; 5) Studies of the etiology of cardiovascular disease among blacks, including Nigeria and the Virgin Islands; and 6) Studies, including clinical trials, of diabetes and cardiovascular disease. Excellent laboratory, research and field resources are available.

Positions available after July 1, 1995. We encourage applications by minorities and women. Applicants must be U.S. citizens or permanent residents. Physician applicants must be eligible for licensure in the United States. Send résumés to: **Dr. Lewis H. Kuller, M.D., Dr. P.H., University of Pittsburgh, Graduate School of Public Health, Department of Epidemiology, 130 DeSoto Street, Pittsburgh, PA 15261. The University of Pittsburgh is an Equal Opportunity/Affirmative Action Educational Institution.**

## POSITIONS OPEN

### POSTDOCTORAL POSITIONS Mayo Clinic and Graduate School

Applications are invited for study of structure and function of molecules related to mechanisms of neurodegeneration. Three positions available immediately: 1) NMR/molecular modeling of trinucleotide repeat DNA (**Gacy et al., Cell, 81:533, 1995**); 2) Nitric Oxide biochemist/molecular biologist; and 3) Molecular biologist interested in either DNA replication, expansion or neurodegeneration.

The focus of the research is understanding the mechanism of neurodegeneration in disease related to trinucleotide expansion and/or oxidative damage. We are using a variety of biochemical, biophysical, cellular and molecular approaches to identify mechanism. General interest in neurobiology is essential. Mayo Foundation is a world-class research institute with medical school and graduate school. Excellent basic research and facilities. Excellent salaries and benefits for qualified individuals. Interested parties should send curriculum vitae and three letters of recommendation to: **Dr. Cynthia T. McMurray, Department of Pharmacology, Mayo Foundation, Rochester, MN 55905. Email: mcmurray@mayo.edu.**

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### POSTDOCTORAL FELLOW MOLECULAR RETROVIROLOGY

Available immediately to participate in ongoing simian immunodeficiency virus (SIV) research projects. Current projects focus on the viral envelope and nef genes to understand the molecular mechanisms of immunopathogenesis and neuropathogenesis of AIDS. Interested individuals are encouraged to send a letter of research interest, curriculum vitae and three references to: **Dr. Toshiaki Kodama, Division of Pathobiology and Immunology, ORPRC, 505 NW 185th Avenue, Beaverton, OR 97006. The Oregon Regional Primate Research Center is an Equal Opportunity Employer.**

**POSTDOCTORAL POSITION** available immediately to study structure-function relationships of ricin toxin. Studies will involve affinity cross-linking of ricin and peptide sequencing, biochemical and immunologic characterization of recombinant ricin, identification of transfected genes inducing mammalian cell resistance to ricin. Experience in protein chemistry and Ph.D. required. Send curriculum vitae, summary of relevant experience and three references to: **Dr. Arthur Frankel, Hollings Cancer Center, Room 306, MUSC, 86 Jonathan Lucas Street, Charleston, SC 29425. FAX: 803-792-3200.**

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**POSTDOCTORAL FELLOW** to conduct research on particle deposition in human respiratory tract, through theoretical and experimental analyses utilizing models and human volunteers. Strong background in aerosol experiments and fluid mechanisms required. Mathematical and numerical modeling ability desired. Send résumé to: **Dr. Philip A. Bromberg, Director, University of North Carolina-Chapel Hill Center for Environmental Medicine and Lung Biology, CB No. 7310, Chapel Hill, NC 27599-7310.**

### MICROBIOLOGIST/BIOLOGIST

Applications are invited for six **MICROBIOLOGIST/BIOLOGIST** positions for the U.S. Army Dugway Proving Ground, Utah. This is an opportunity to join a team of professionals involved with unique challenges in the field of biological defense testing and analysis to include technical transfer worldwide, and evaluation of state-of-the-art technology. The successful applicants will have Master's or Doctorates in microbiological or biological sciences. Involved specialties of the positions are acrobiology, biotechnology, molecular genetics for isolation and expression of enzymes and monoclonal antibodies, production of ribozymes capable of binding to specific materials or antigens. The positions are temporary and expected to last four years with possible conversion to permanent status. Incumbents will be entitled to health and life insurance. Salary range is \$29,405 through \$55,432 per annum. U.S. citizenship is required. Contact: **Ms. Jackie Wilde, Human Resource Office, Dugway Proving Ground, UT 84022-5000. Telephone: 801-831-2181, Monday through Thursday, 7:00 a.m. to 5:30 p.m. MST for information and application packet. An Equal Opportunity/Affirmative Action Employer.**

## POSITIONS OPEN

**POSTDOCTORAL POSITION** available immediately to study molecular regulation of extracellular matrix synthesis and degradation in human glomerular mesangial cells. Well-funded lab group emphasizes open interaction and sharing of ideas. Training in cell and molecular biology is essential (less than four years from Ph.D.); experience with mechanisms of cell activation or regulation of gene expression desirable. Send curriculum vitae and names of three references to: **William Schnaper, M.D., Northwestern University Medical School, PEDS W-140, 303 East Chicago Avenue, Chicago, IL 60611-3008. Telephone: 312-503-1180; FAX: 312-503-1181; Email: hws124@nwu.edu. Northwestern University is an Equal Opportunity/Affirmative Action Educator and Employer.**

### MOLECULAR BIOLOGIST/PH.D. Hy-Line International

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**RESEARCH ASSOCIATE** for projects involving laboratory simulations of planetary and prebiological organic chemistry. Ph.D. in Chemistry or other physical science with experience in one or more of the following areas: atmospheric organic chemistry, radiation chemistry, bio-organic chemistry, organic geochemistry, cosmochemistry. Expertise in one or more of the following: GC/MS, HPLC, quantitative UV/VIS/IR spectroscopy, vacuum systems. Interest in planetary science, exobiology, origin of life. Send curriculum vitae and three reference letters to: **Prof. Carl Sagan, Laboratory for Planetary Studies, Cornell University, Ithaca, NY 14853-6801. Cornell University is an Affirmative Action/Equal Opportunity Employer.**

**RESEARCH ASSOCIATE/Postdoctoral position** available immediately to study thalamic neuropathology in schizophrenia. Experience with large sectioning techniques, human thalamic anatomy, or stereological techniques a plus. Salary range up to \$35,000 for well-qualified candidate. Send résumé and three reference telephone numbers to: **Keith Young, Ph.D., Neuroscience Lab (11S), WACO CTMC, 4800 Memorial Drive, Waco, TX 76711. FAX: 817-755-8768; Email: young.keith@waco.va.gov. We are an Equal Opportunity Employer.**

### AQUATIC CONSERVATION ZOOLOGIST

The Nature Conservancy seeks Aquatic (freshwater) Conservation **ZOOLOGIST** to provide expertise and further develop databases on aquatic (especially invertebrate) biota, to identify those U.S. rivers most critical to the conservation of biodiversity, and to support riverine conservation. He/she will work with a Network of Conservation Data Centers to develop and compile consistent information on the status and distribution of aquatic species. Ph.D. or experience. This position involves minimal field work. Submit a cover letter and curriculum vitae to: **Larry Master, The Nature Conservancy, 201 Devonshire Street, Boston, MA 02110. Telephone: 617-542-1908. An Equal Opportunity Employer.**

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**Interested scientists should send their curriculum vitae, bibliography, names of three individuals willing to serve as references, and a statement of research interests to: Dr. Bruce Woda, Department of Pathology, University of Massachusetts Medical**

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**For further information and application materials contact: EID Laboratory Fellowship Program, ASTPHLD, 1211 Connecticut Avenue, N.W., Suite 608, Washington, D.C. 20036, Phone: 202-822-5227, Fax: 202-887-5098**

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Molecular Devices Corporation offers a limited number of equipment grants to both U.S. and International academic/government institutions performing basic research in mammalian cell biology. The intent of this grant program is to provide academic/government researchers access to the Cytosensor® Microphysiometer technology at a substantially reduced cost, thereby enabling them to make novel discoveries using the Cytosensor System, with the ultimate goal of publication.

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**Molecular Devices Corp.  
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Sunnyvale, CA 94089  
PH: (408) 747-3545  
FX: (408) 747-3602**

**AMERICAN ASSOCIATION FOR CANCER  
RESEARCH (AACR)**

The AACR is a professional society of over 10,000 scientists involved in basic, clinical, and translational cancer research. Major activities include:

- Publication of four outstanding scientific journals:
  - *Cancer Research*
  - *Clinical Cancer Research*
  - *Cell Growth & Differentiation*
  - *Cancer Epidemiology, Biomarkers & Prevention*
- A major multidisciplinary annual meeting attended by about 7,000 scientists
- Sponsorship of Women in Cancer Research, promoting the professional advancement of women in the field
- Six to eight special conferences each year focused on timely issues in cancer research
- Three summer workshops providing unique training opportunities particularly for young investigators
- Special programs for minority scientists
- Travel grants to AACR meetings and a growing number of research fellowships
- Employment register of available positions and candidates in the field
- Publication of an up-to-date directory of over 10,000 members and a quarterly newsletter

**American Association for Cancer Research**  
Public Ledger Building, Suite 816  
150 S. Independence Mall West  
Philadelphia, PA 19106-3483  
Telephone: (215) 440-9300 • FAX: (215) 440-9313

**POSTDOCTORAL FELLOWS**

IDEC Pharmaceuticals is a leader in the development of immunologically active monoclonal antibodies for therapeutic applications in the area of certain cancers and autoimmune disorders. We pride ourselves in the excellence of our team members and invite you to join us. We seek two Postdoctoral Fellows to join our growing team.

**Gene Expression:** This position will focus on: enhancing our current expression system in CHO, using homologous recombination to develop high-level immunoglobulin expression in CHO, and leading basic research projects on gene expression of heterologous glycoproteins in mammalian cells. The duties will include performing complex molecular biology techniques and sterile, tissue culture as well as developing, executing, and evaluating complex experiments. The selected candidate will have a Ph.D. or equivalent in molecular biology, genetics, or a related field.

**Molecular Immunology:** This position will focus on genetic engineering of recombinant antibodies, ligands, receptors, and antigens for the development of therapeutic antibodies and vaccines. Qualified candidates will have a Ph.D. or equivalent in immunology, molecular immunology, molecular biology or related fields, with significant experience in genetic engineering.

\*\*\*\*\*

We offer a competitive compensation package and excellent working conditions. Please specify which position(s) you are applying for when you send your resume and salary history to: IDEC Pharmaceuticals Corp., MB Ad, 11011 Torreyana Rd., San Diego, CA 92121. EOE.



**POSTDOCTORAL/PROFESSIONAL RESEARCHER FELLOWSHIPS  
IN THE  
DEPARTMENT OF ANATOMY AND NEUROBIOLOGY  
UNIVERSITY OF CALIFORNIA, IRVINE**

Several positions for research in individual laboratories in the Department are available for candidates who have demonstrated research promise at the postdoctoral and professional researcher series level. The emphasis of research in the Department is the Neurosciences with special expertise in developmental neurobiology, cellular and molecular neurobiology, and neuromorphology. The faculty of the Department and their research interests are:

Dr. Tallie Z. Baram:	Cellular basis of neonatal seizures.
Dr. Robert H. Blanks:	Eye movement control, physiology of upper airway.
Dr. Anne L. Calof:	Developmental neurobiology: mechanism of cell death.
Dr. James H. Fallon:	Chemical neuroanatomy, transmitters and growth factors.
Dr. Christine M. Gall:	Limbic/olfactory anatomy, neurotrophic factors, neuronal gene expression, epilepsy, limbic neuroanatomy.
Dr. Roland A. Giolli:	Visuomotor system; structure/function relationships.
Dr. Edward G. Jones:	Transmitter regulation in primate cerebral cortex.
Dr. Leonard M. Kitzes:	Auditory system anatomy and physiology.
Dr. W. Ian Lipkin:	Neurotropic viruses and viral pathogenesis, Borna disease virus.
Dr. Sandra E. Loughlin:	Monamines, peptides and growth factors, and their receptors.
Dr. Diane K. O'Dowd:	Function and regulation of ion channels and development of functional synaptic connections.
Dr. Charles E. Ribak:	Epilepsy, neurotransmitters and hippocampal circuits.
Dr. Richard T. Robertson:	Developmental neurobiology of cerebral cortex.
Dr. Martin A. Smith:	Regulation of gene expression during synapse formation.
Dr. Ivan Soltesz:	Plasticity of cortical inhibition.
Dr. John E. Swett:	Spinal cord and peripheral nervous system.
Dr. John H. Weiss:	In vitro models of selective neurodegeneration; roles of glutamate receptors/channels, calcium and other endogenous factors.

Interested applicants should send curriculum vitae to:  
Dr. Richard T. Robertson, Professor and Interim Chair  
Department of Anatomy and Neurobiology  
University of California, Irvine  
Irvine, CA 92717-1275

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**VACANCY ANNOUNCEMENT**

**DEPUTY DIRECTOR  
OFFICE ON WOMEN'S HEALTH  
U.S. PUBLIC HEALTH SERVICE**

The U.S. Department of Health and Human Services (DHHS), is recruiting for the position of Deputy Director of the Public Health Service's (PHS) Office on Women's Health (OWH), a senior position within the DHHS and located in Washington D.C. The incumbent will serve as the second-in-command in the OWH, collaborating with the Deputy Assistant Secretary for Health (Women's Health) in planning, implementing, coordinating and evaluating both the various policy and program initiatives undertaken by the OWH and across the agencies of the Public Health Service including NIH, CDC, FDA, HRSA, AHCPR, SAMHSA, IHS, and 10 PHS regional offices.

The PHS's Office on Women's Health is the cornerstone in the Department's overall commitment to the improvement of women's health. The OWH provides national leadership in the advancement of women's health in policy and program development, service delivery, and the conduct of research, and in public and health care professional education. The Office serves as a catalyst to the development of new initiatives in women's health at the national and regional levels, and establishes collaborative partnerships between the public and private sectors to advance women's health nationwide. The mission of the Office is to: (1) increase women's access to comprehensive disease prevention, health promotion and treatment programs nationwide; (2) stimulate and strengthen a broad spectrum of research on women's health issues; (3) the public and health care professionals about women's health issues, and (4) foster the recruitment, retention and promotion of women in the health professions and in research careers in our nation's academic and federal institutions.

The Deputy Director's salary ranges from \$71,664 to \$92,856 per year (GS-15). An additional allowance of \$10,000 to \$20,000 will be paid to physicians.

Applicants should possess a Doctor of Medicine degree **OR** bachelor's or higher degree with a major in an academic field related to the health sciences or allied sciences. In addition, must have experience in directing, conducting and evaluating scientific programs and assessing and implementing public policy dealing with public health, with an emphasis on women's health. For further information about this position, qualification requirements, and application procedures, call (301) 443-6900. Position opens 7/31/95 and closes 8/30/95. *The U.S. Government is an equal opportunity employer. Minorities, women, and persons with disabilities are encouraged to apply.*

**NEW FROM THE NEW YORK  
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**Combined Vaccines and  
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Jim C. Williams, Karen L. Goldenthal,  
Drusilla L. Burns, and Benjamin P. Lewis, Editors

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Brings together contributions from members of the scientific, public health, and regulatory communities to address safety, immunogenicity, protective efficacy, development of immunologic correlates of protection, and manufacturing issues. Scientific advances and regulatory issues bearing on the development of combination vaccines and vaccines for simultaneous administration, are covered, as are the goals and impact of the Children's Vaccine Initiative.

ISBN 0-89766-862-6 Volume 754  
Published June 1995  
404 Pages, 45 Papers \$140.00



**Disease in Evolution  
Global Changes and Emergence of  
Infectious Diseases**

Mary E. Wilson, Richard Levins & Andrew Spielman  
(Harvard School of Public Health), Editors

*Proceedings of a workshop sponsored by the Harvard  
School of Public Health's Working Group  
on New and Resurgent Diseases, November 7-10, 1993*

Practitioners of diverse disciplines report on recently developed techniques, including molecular biology, genetics, mathematical modeling, and remote sensing, which are exploited in an effort to understand global configurations of infectious disease emergence. Analysis of historical examples reveals patterns not apparent during a single lifetime of observation. This volume emphasizes the creative use of cross-disciplinary approaches to extend the limits of knowledge in this important area.

ISBN 0-89766-876-6 Volume 740  
Published December 1994  
503 Pages, 32 Papers \$145.00



**DNA: The Double Helix  
Perspective and Prospective at Forty Years**

Donald A. Chambers  
(University of Illinois at Chicago), Editor

*Proceedings of a conference sponsored jointly by  
the New York Academy of Sciences,  
the University of Illinois at Chicago, and Green College  
of Oxford University, October 13-16, 1994.*

Celebrates the 40th anniversary of the publication of the original papers describing the structure of DNA as a double helix with papers by many of the major participants in this biological revolution as well as by current leaders in molecular biology. Includes reminiscences of the early history of molecular biology that led to the discovery of DNA's structure and prognostications concerning where those discoveries are likely to take us in the 21st century.

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Qualified candidates will possess a PhD in pharmacokinetics/biopharmaceutics with a thorough understanding of pharmacokinetic and pharmacologic processes, as well as analytical and statistical methods. Candidates must be familiar with analytical methods development for the quantitation of drug candidates in various biological fluids. At least 2 years experience, preferably in industry, with a strong familiarity with FDA regulatory procedures and requirements is a must. Experience with regulatory submission (INDs and NDAs) is highly desirable.

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# NIH Re-Entry Program

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A report, "Women in Biomedical Careers: Dynamics of Change," is available from ORWH.

## National Institutes Of Health

### Office of Research on Women's Health

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## GENOME SCIENTIST

Merck Research Laboratories in West Point, Pennsylvania, a world leader in biological and pharmaceutical research, has an immediate opening for a Genome Scientist in the department of Human Genetics.

A Ph.D. degree in the field of molecular biology or equivalent with experience in automated template preparation, gel-based automated sequencing, computer data management and personnel management is required. Practical experience in gene discovery is desirable. This individual should be strongly motivated and able to work independently as well as in a team environment.

Excellent salary and benefit programs accompany this position at our modern research facilities located 25 miles northwest of Philadelphia.

Please send curriculum vitae with cover letter to: **Personnel Manager, Ad #B-31, MRL Human Resources, WP42-2, Merck Research Laboratories, P.O. Box 4, West Point, PA 19486.** EEO/AA/V/Employer.



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Center for Structural Biology

### FACULTY POSITIONS: NUCLEAR MAGNETIC RESONANCE

The Center for Structural Biology of the College of Medicine, University of Florida currently has an opening for a faculty member conducting innovative research emphasizing nuclear magnetic resonance. The Center is associated with the National High Magnetic Field Laboratory (NHMFL), which is jointly run by Florida State University, the University of Florida, and the Los Alamos National Lab. The Center is an interdisciplinary program with emphasis on understanding of biological function by determining high-resolution structures of large biological molecules and assemblies, studying cell structure and function, and the morphology and physiology of the whole organism. Within the Center, advanced spectroscopic, diffraction, and imaging techniques (nuclear magnetic resonance, optical microscopy, and electron microscopy; X-ray crystallography is being planned) are used to derive molecular-based information related to cellular, tissue, and organism-level structure and function. The Center houses NMR spectrometers (Varian Unity 300 and Unity 600) used for macromolecular structure determination and microscopy. In addition, Center faculty use prototype magnets and spectrometers located at the NHMFL Tallahassee site, including a wide-bore 600 MHz and a 720 MHz high-resolution spectrometer, with additional magnet systems under development for operation at higher fields.

The Center wishes to recruit a macromolecular high-resolution NMR spectroscopist. Interested persons are invited to apply for this tenure-track faculty position, at any level, with direct association to the National High Magnetic Field Laboratory. Applicants at the assistant professor level need extensive experience with NMR at the post-doctoral or more advanced level with interest in developing and expanding experimental techniques. In addition, applicants at the associate or full professor level need to have an established program with extramural funding. Successful candidates will conduct innovative research emphasizing NMR and will use the facilities of the Center for Structural Biology, with additional support provided through the facilities of the NHMFL. Opportunities exist for collaborative research in areas such as biochemistry, cell biology, pharmacology, or physiology.

Applicants must have a Ph.D. Degree and a minimum 1 year postdoctoral experience. Submit a C.V. with statement of research interests and three letters of reference by September 15, 1995. Anticipated starting date January 1, 1996. Salary commensurate with experience. All correspondence should be sent to Thomas H. Mareci, Ph.D., Director, Center for Structural Biology, College of Medicine, University of Florida, Box 100245, Gainesville, FL 32610-0245. *The University of Florida is an Affirmative Action-Equal Opportunity employer, and applications from minorities and women are strongly encouraged. Gainesville is an attractive University community in North-central Florida with good low-cost housing, quality public schools, and many outdoor activities.*



**ASSISTANT PROFESSOR  
OF PHARMACEUTICS  
THE UNIVERSITY OF MICHIGAN**

Applications are invited for a full-time, tenure-track position at the level of Assistant Professor of Pharmaceutics. Salary will be commensurate with qualifications and experience. Candidates should have a Ph.D. and a minimum of one year postdoctoral experience with research interests in one or more of the following areas:

- transport/drug delivery
- a biopharmaceutics/pharmacokinetics
- drug metabolism

Candidates who emphasize molecular biology in their research approach are preferred. The successful candidate will be expected to participate in both undergraduate and graduate instruction and develop an independent research program in his/her area of expertise.

The position is presently available and the review of applications will begin immediately. Preferential consideration will be given to applications received by September 30, 1995. Applicants are requested to provide a letter of application, a curriculum vitae, a statement of research interests and three letters of recommendation to:

Dr. Nafr Rodríguez-Hornedo  
Chair, Search Committee for Faculty Position in Pharmaceutics  
College of Pharmacy  
University of Michigan  
Ann Arbor, Michigan 48109-1065

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**Faculty Positions (Tenure Track)  
and  
Postdoctoral Fellowships  
in  
The Hollings Cancer Center  
Medical University of South Carolina**

As part of the continuing development of the Hollings Cancer Center, four tenure-track faculty positions have become available at the level of assistant/associate professor. Applications are invited from individuals with Ph.D. and/or M.D. degrees whose research interests complement our existing programs in either molecular carcinogenesis, experimental therapeutics, molecular biology of cytokines, or clinical oncology research. Preferred candidates will be those who are currently principal investigators on peer-reviewed research grants. Appointments will be within the Departments of Experimental Oncology, Medicine, or other academic departments where mutual interests may exist. Highly competitive start-up packages are available that include support for faculty and technical salaries, laboratory supplies, and the purchase of major equipment.

**CARPENTER FELLOWSHIPS:** Two post doctoral fellowships are available for study in the laboratories of Hollings Cancer Center members. These fellowships will support research activities in experimental therapeutics, hematopoiesis, molecular carcinogenesis, and cancer prevention. Candidates should have a recent Ph.D. degree in a cancer-related discipline.

Applicants for either faculty or fellowship positions should send a curriculum vitae, description of research interests, and the names and telephone numbers of three references to:

**Daniel J. Fernandes, Ph.D., D.Sc.  
Hollings Cancer Center  
Medical University of South Carolina  
171 Ashley Avenue  
Charleston, SC 29425-2850**



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**POSTDOCTORAL RESEARCHER  
UNIVERSITY OF  
CALIFORNIA, IRVINE**

Postdoctoral position available immediately to work on the neuropathology of schizophrenia. Two or more years experience in neuroanatomy and/or molecular biology preferred. M.D. or Ph.D.

Send curriculum vitae and three references to:

Dr. Edward G. Jones, MD., Ph.D.  
Department of Anatomy and  
Neurobiology  
University of California, Irvine  
Irvine, California 92717-1275

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**PROFESSOR**

*Harvard Medical School  
Brigham and Women's Hospital*

The Harvard Medical School and Brigham and Women's Hospital jointly invite applicants with a commitment to the broad field of gene therapy for the position of Professor of Medicine (Human Genetics). We anticipate that this individual will direct a premier program of fundamental research and also collaborate with leadership of gene therapy initiatives at Harvard Medical School and its affiliated hospitals. Nominations, letters of application and curriculum vitae should be sent to: Dr. Dennis L. Kasper, Chairman, Search Committee, Channing Laboratory, Brigham and Women's Hospital, 180 Longwood Avenue, Boston, MA 02115.

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and minorities.*

**HARVARD MEDICAL SCHOOL**



**FACULTY POSITIONS  
DEPARTMENT OF CHEMISTRY**

The Department of Chemistry seeks to fill several tenure-track faculty positions at the assistant professor level to begin September 1996. Outstanding senior candidates will also be considered. Broadly defined areas of interest are biological, inorganic and organic chemistry. Demonstrated excellence in innovative research and a strong commitment to teaching at both the undergraduate and graduate levels are essential. Candidates should submit a curriculum vitae, undergraduate and graduate transcripts in the case of junior candidates, list of publications, statement of research and teaching interests, and three letters of recommendation to: Professor Matthew S. Platz, Chair, Department of Chemistry, The Ohio State University, 120 W. 18th Avenue, Columbus, OH 43210-1173. Alternative contact may be made via telephone (614-688-3390) or FAX (614-292-1685). Review of applications will begin October 2, 1995, and interviewing of candidates will begin as early as November 15, 1995.

*The Ohio State University is an Equal Opportunity, Affirmative Action Employer. Women, minorities, Vietnam-era veterans, disabled veterans, and individuals with disabilities are encouraged to apply.*

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### FACULTY POSITION IN MASS SPECTROMETRY DEPARTMENT OF CHEMISTRY

A search has been initiated for a faculty member with an active research program in the area of mass spectrometry. Candidates will be considered at both the junior and senior level. We are particularly interested in individuals with research activities in the biosciences.

Commitment to teaching at both the undergraduate and graduate levels is required in addition to excellence in research. The University has made a commitment to fortify research and teaching associated with the chemistry of biological materials. The opportunity exists for the candidate to be a leader in interdisciplinary and collaborative efforts in the molecular life sciences.

Interested applicants should submit a curriculum vitae, undergraduate and graduate transcripts in the case of junior candidates, list of publications, brief statement of proposed directions for both research and teaching, in addition to three letters of recommendation to: Professor Matthew S. Platz, Chair, Department of Chemistry, The Ohio State University, 120 W. 18th Avenue, Columbus, OH 43210-1173. Alternative contact may be made via telephone (614- 688-3390) or FAX (614-292-1685). Review of applications will begin October 2, 1995, and interviewing of candidates will begin as early as November 15, 1995.

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## SCIENCE

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**NIH SEEKS TWO SCIENTISTS/PHYSICIANS  
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The Division of Allergy, Immunology and Transplantation (DAIT) is seeking two outstanding physicians (M.D.) or scientists (Ph.D.) to serve as Chief of the Basic Immunology Branch and Chief of the Molecular and Structural Immunology Section within that Branch. Candidates should have a strong research background in the fields of molecular or cellular immunology, microbiology, or biochemistry.

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The Basic Immunology Branch Chief is a GS-15 position with a salary range up to \$92,856 per annum for physicians and \$88,326 per annum for non-physicians. The Molecular and Structural Immunology Section Chief is a GS-14 position with a salary range up to \$84,710 per annum for physicians and \$75,085 per annum for non-physicians. Physicians comparability allowance up to \$20,000 may be applicable.

Please send resume or your Application for Federal Employment (SF-171) to:

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PHS/NIH/NIAD  
Bldg. 31, Room 7A-20  
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Bethesda, MD 20892  
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Telephone#: 301-402-1421  
Fax#: 301-496-1940  
ATTN: Kristie Daniel**

*U.S. Citizenship required.  
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**LOUISIANA STATE UNIVERSITY**

**ASSISTANT PROFESSOR**

**Assistant Professor of Molecular Genetics**, anticipated. The Department of Poultry Science, Louisiana Agricultural Experiment Station, Louisiana State University Agricultural Center invites applicants for an **Assistant Professor** (non-tenure track; minimum two year appointment) to join an active multi-disciplinary research team to examine endocrine mechanisms of stimulating ovulation in avian species. Candidates should possess a Ph.D. in biochemistry, microbiology, or a closely related discipline with specific experience in PCR technologies, DNA sequencing, DNA synthesis, expression systems, protein purification, and DNA diagnostics. Beneficial, but not required, areas of expertise would include knowledge in endocrinology and reproductive physiology. Interested persons should submit a letter of intent and curriculum vitae to Dr. Roger A. Teekell, Professor and Department Head, Department of Poultry Science, 102 Clyde Ingram Hall, Louisiana State University, Baton Rouge, LA 70803. Telephone: (504) 388-4481. *Louisiana State University is an Affirmative Action/Equal Opportunity Employer.*

**ASSISTANT PROFESSOR**

**Assistant Professor of Immunology**, anticipated. The Department of Poultry Science, Louisiana Agricultural Experiment Station, Louisiana State University Agricultural Center invites applicants for an **Assistant Professor** (non-tenure track; minimum two year appointment) to join an active multi-disciplinary research team to examine endocrine mechanisms of stimulating ovulation in avian species. Candidates should possess a Ph.D. in immunology, microbiology, or a closely related discipline with specific experience in the production of monoclonal antibodies and the development of RIA and ELISA. Relevant areas of expertise should include knowledge in endocrinology and nucleic acid analyses. Interested persons should submit a letter of intent and curriculum vitae to Dr. Roger A. Teekell, Professor and Department Head, Department of Poultry Science, 102 Clyde Ingram Hall, Louisiana State University, Baton Rouge, LA 70803. Telephone: (504) 388-4481. *Louisiana State University is an Affirmative Action/Equal Opportunity Employer.*

**APPLICATIONS AND NOMINATIONS ARE INVITED  
FOR THE POSITION OF**

**DEAN  
COLLEGE OF VETERINARY MEDICINE  
MICHIGAN STATE UNIVERSITY**

Michigan State University invites applications and nominations for the position of Dean, College of Veterinary Medicine, Michigan State University. An individual is sought who will provide leadership for the continuing excellent development of instructional, research, clinical, and outreach programs, and who will serve as a representative of the college in its interactions with other MSU colleges, the public, the legislature, and the veterinary community. The Dean of the College of Veterinary Medicine is the chief executive officer and is responsible to the provost and the president for the general administration of the college.

Michigan State University enrolls approximately 40,000 students and is a research-intensive land-grant institution with 14 colleges, including the Colleges of Human and Osteopathic Medicine. Its 5,000-acre park-like campus is widely recognized as one of the most beautiful in the nation. The College of Veterinary Medicine consists of the Departments of Large and Small Animal Clinical Sciences, and the shared Departments of Anatomy, Microbiology, Pathology, Pharmacology and Toxicology, and Physiology. In addition, the college contains the Animal Health Diagnostic Laboratory and the Veterinary Teaching Hospital, which are situated in a modern, state-of-the-art facility. The college's \$25 million all-funds budget supports approximately 150 ranked faculty and 220 support staff. The 400 veterinary medical students and 60 graduate students are enrolled in the DVM professional program, MS and PhD programs, or intern and residency programs in various clinical specialties. There is also a baccalaureate program in Veterinary Technology. Both the DVM and the Veterinary Technology programs are fully accredited by the AVMA.

Applicants must have the DVM degree (or its equivalent), and a doctorate is preferred. A demonstrated commitment to research, teaching, clinical service, and outreach is necessary. Evidence of scholarship and dynamic leadership is essential. Candidates must meet standards for appointment at the rank of professor (with tenure) in an academic department in the college. Women and minorities are encouraged to apply. Expected starting date is July 1, 1996, or as soon as possible thereafter.

Handicappers have the right to request and receive reasonable accommodation.

Applications and nominations are requested as soon as possible, and preferably by October 1, 1995. The committee will begin evaluation of applications immediately after Labor Day (September 5, 1995), so an early submission is desirable.

Applications and nominations should be sent to:

**Dr. David J. Sprecher, Chairperson  
Search and Rating Committee for Dean  
College of Veterinary Medicine  
Michigan State University  
312 Administration Building  
East Lansing, MI 48824**

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## Ph.D. SCIENTIST Biopharmaceutical Product Development Division

For more than 115 years, scientists at Eli Lilly and Company have been developing novel, high quality pharmaceutical products. With a current yearly investment of over \$900 million in research and development programs, our continued success in reducing the time required to get new drug candidates to market requires the finest scientific talent available.

To further build our research capabilities, we are seeking a self-motivated, innovative Scientist with a Ph.D. in Analytical Chemistry or Biochemistry for our Biopharmaceutical Product Development Division. This position involves the characterization of protein and glycoprotein pharmaceutical product candidates undergoing clinical trials.

Experience in the pharmaceutical and/or biotechnology industry is highly desirable. A major focus of this position will be the characterization of the carbohydrate portion of glycoprotein pharmaceutical product candidates. This position offers the opportunity to collaborate with a large number of skilled protein development chemists and biochemists. The laboratories are equipped with a wide array of state-of-the-art protein analytical instrumentation, including amino acid sequencers, amino acid analyzers, protein mass spectrometers (both electrospray and MALDI-TOF), capillary electrophoresis and carbohydrate HPLC analyzers.

Eli Lilly and Company offers a competitive compensation and benefits package and a highly professional environment. For prompt consideration, please forward your resume to: **Eli Lilly and Company, Scientific Recruitment, Dept. RR, Lilly Corporate Center, Indianapolis, IN 46285.** We are an Equal Opportunity Employer committed to diversity in the workplace.



KNOWLEDGE IS POWERFUL MEDICINE



ASTRA MERCK

At Astra Merck, Inc., we've put our hearts and minds behind a new kind of company. We are a customer-focused, technologically-enabled business organization that markets pharmaceutical products and services to identified academic centers, managed-care systems, hospital buying groups and other defined market segments.

## Medical Information Scientist

The Medical Information Scientist is responsible for exceeding the medical information needs of a sub-set of customers with diverse needs in highly technical disease entity, medical economic and/or product information areas. If selected, you will represent our group to thought leaders within non-traditional and academic communities. You will identify, establish and maintain service relationships by providing up-to-the minute, well-researched information to clinicians, investigators and institutions who impact on product purchasing decisions. We are seeking individuals with Pharm.D., Ph.D., and/or M.D. credentials who have highly developed interpersonal and computer skills, as well as a commitment to public health and welfare while working in a team environment.

We offer a highly competitive compensation and benefits package. For consideration resumes and salary requirements must be received no later than Friday, August 25, 1995. Replies should be mailed to Astra Merck, Inc., 135 Corporate Woods, #350, Rochester, NY 14623, attn. David Sen, Business Manager. No phone calls please. We are an equal opportunity/affirmative action employer.

## DEKALB Genetics Corporation Career Opportunities B.S., M.S., and Ph.D.

**DEKALB Genetics Corporation** is the fastest growing agricultural seed company in the U.S. Our mission is to provide our customers with seed products that improve their productivity and profitability. We believe our biotechnology research program will play an increasingly important role in fulfilling that mission. We seek bright, creative and ambitious scientists to join our expanding multidisciplinary team focused on the genetic improvement of crop plants.

**QUANTITATIVE GENETICIST** - We seek an experienced quantitative geneticist to lead a multidisciplinary team focused on the application of molecular markers to plant breeding. A **Ph.D.** in genetics with experience in DNA marker technology, quantitative trait analysis and plant breeding is required.

**DNA MARKER LAB MANAGER** - We have an opening for an experienced and ambitious molecular geneticist to join our expanding effort in molecular marker assisted plant breeding. We seek a well organized individual with a solid background in genetics and molecular biology to oversee the daily operations of our molecular marker lab, including the supervision of technical staff, and to contribute to the development of new methodologies in molecular marker mapping. An **M.S.** degree with experience in molecular biology, genetics and computers is required. Experience in gene mapping, quantitative trait analysis, and laboratory management is desirable.

**PROTEIN BIOCHEMIST** - We seek a resourceful and independent scientist with expertise in the purification and characterization of proteins from natural and recombinant sources to work with both our product discovery and product development teams. Applicants should have a demonstrated ability to design and perform biochemical studies, purify proteins from complex mixtures and establish enzyme and immunological assays. A **Ph.D.** in Biochemistry is required. Postdoctoral experience and some industrial experience is desirable.

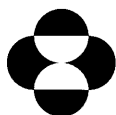
**INSECT RESISTANCE** - We have opportunities for scientists at the **B.S.**, **M.S.** and **Ph.D.** levels to join a research team focused on the discovery and development of genes for insect resistance. Individuals with experience in molecular biology, protein biochemistry or entomology are encouraged to apply.

The successful candidates will be located at DEKALB's Discovery Research laboratory facility in Mystic, CT, a scenic shoreline community located on Long Island Sound halfway between New York and Boston. In addition to a stimulating scientific environment, DEKALB offers competitive compensation, an attractive benefits package and an outstanding working environment.

Send applications and the names, addresses and phone numbers of three professional references to: **Ms. Katrina Henry, DEKALB Discovery Research, 62 Maritime Drive, Mystic, CT 06355-1958.**



DEKALB Genetics Corporation



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Innovative management style, social responsibility, workforce diversity, and environmental concern are the hallmarks of our company and the reasons that we have become the world leader in health care. Those who choose a career with us, will join the best, most creative minds in the pharmaceutical industry. Together they will strive to realize Merck's corporate mission which is to provide society with superior, innovative products that improve and protect human and animal health.

At Merck, you will find many routes to success and many helping hands along the way. If you would like to join our very special company, please write to: Manager, Human Resources, Merck & Co., Inc., P.O. Box 2000, Rahway, New Jersey 07065. RY80-A3

We are an Equal Opportunity Employer Hiring on the basis of talent.

**ENGINEERING** - Biochemical (BS/MS/PhD). Chemical (BS/MS/PhD). Civil (BS/MS/PhD). Electrical (BS/MS/PhD). Environmental (BS/MS/PhD). Industrial (BS/MS/PhD). Mechanical (BS/MS/PhD). **SCIENCE** - Biological Sciences (BS/MS/PhD). Biochemistry (BS/MS/PhD). Chemistry (BS/MS/PhD). Information Systems (BS/MS/PhD). Medicine (MD/MD/MBA). Pharmacology (BS/MS/PhD). Veterinary Medicine (DVM).

**R**icerca is a broad-based technology company which provides contract R&D and technical services to assist clients in developing new chemical products/processes and in supporting product registration for world-wide regulatory compliance.

Our 300+ scientists, engineers and support personnel conduct activities on an 80-acre campus near Cleveland, Ohio. Over 260,000 sq ft of floor space is equipped with well-maintained, up-to-date instrumentation and equipment. Facilities include a wide variety of chemical and life science laboratories, pilot plants, research greenhouses and farms, and numerous support areas.

As part of our ongoing corporate expansion, we are actively seeking a Study Director for our Animal Metabolism Group.

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The ideal candidate will have a Ph.D. in a biological or chemical science and 10 years' experience directing small (mouse, rat) and large (goat, dog, chicken) animal pharmacokinetic, biliary, dermal, and ADME studies under GLP. Relevant experience in the pharmaceutical or agrochemical industries is preferred. Strong verbal and written communication skills and proficiency in the use of PC-based spreadsheets and word processing software are required. Responsibilities will also include developing client relationships.

Ricerca, an equal opportunity employer, offers a competitive salary and an excellent Employee Benefits Program. Qualified candidates are encouraged to submit resumes and salary history for confidential consideration to the Human Resources Department.

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Phone: 01-301-650-0282 or 01-301-589-6760  
Fax: 01-301-650-0398

## INDIANA UNIVERSITY

### TENURED FACULTY POSITION-PHYSICAL CHEMISTRY.

The Department of Chemistry at Indiana University invites applications for a tenured position in experimental physical chemistry at the level of Associate or Full Professor. Outstanding, established teacherscholars are sought whose interests will complement those of the current faculty. The position is available beginning with the academic year 1996/97. Applicants should submit a curriculum vitae, a list of publications, and a brief discussion of on-going research projects to Professor Ernest R. Davidson, Chair of Search Committee, Department of Chemistry, Indiana University, Bloomington, Indiana 47405 (FAX: (812) 855-8300, e-mail: davidson@indiana.edu). The deadline for receipt of applications is November 1, 1995. Minority and female applicants are encouraged to apply. *Indiana University is an equal opportunity/affirmative action employer.*

### ANALYTICAL CHEMISTRY

The Department of Chemistry at Indiana University, Bloomington, invites applications for a tenure-track faculty position in analytical chemistry at all levels beginning in the Fall of 1996. Junior-level applicants must show exceptional promise of establishing a vigorous, independent research program in an academic setting. Junior-level applicants should submit a curriculum vitae, a publication list, and a short resume of ideas for the development of research programs, and arrange to have three letters of recommendation forwarded. Established investigators should send a letter of application and appropriate supporting materials. Deadline for applications is October 16, 1995. Please apply to: Professor Gary M. Hieftje, Chairman of Search Committee, Department of Chemistry, Indiana University, Bloomington, IN 47405. *Indiana University is an Affirmative Action/Equal Employment Opportunity Employer and especially encourages applications from women and members of minority groups.*

Pharmaceutical

## MOLECULAR BIOLOGIST

The DuPont Merck Pharmaceutical Company is focused on meeting unmet medical needs through the discovery and development of innovative compounds leading to novel pharmaceuticals.

Currently, a position is available for a motivated and experienced Molecular Biologist. The qualified candidate should have a BS or MS degree in molecular biology or a related field together with several years of work experience. In addition to standard molecular biology protocols, familiarity with RNA isolations, RT-PCR, RNase protection assays, in situ hybridization and other RNA manipulations is highly desirable. Some background in chemistry, especially as it pertains to oligonucleotide synthesis would be helpful.

We offer a highly stimulating scientific environment, a competitive salary and a comprehensive benefits package. For immediate consideration, please forward your resume to: Human Resources-KBD, The DuPont Merck Pharmaceutical Company, Experimental Station, 400/2413, P.O. Box 80400, Wilmington, DE 19880-0400. An equal opportunity employer.



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## GENE EXPRESSION SCIENCES

### Postdoctoral Scientist

SmithKline Beecham, a worldwide leader in the pharmaceutical industry, has an opening for a Postdoctoral Scientist in our Gene Expression Sciences department.

The selected candidate will utilize skills to perform experiments in gene cloning, characterization of transcriptional regulatory factors and identification of gene control elements for a novel receptor involved in chemotactic signalling.

To qualify, you must have a Ph.D. in Molecular Biology or relevant field with experience in procaryotic and eukaryotic gene cloning, gene regulatory technologies and with radioactive compounds. Publications in scientific journals is required.

Located in our state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham offers an excellent compensation/benefits/relocation package as well as a stimulating work environment. For confidential consideration, please send your resume to: SmithKline Beecham Pharmaceuticals, Job Code M0249, P.O. Box 2646, Bala Cynwyd, PA 19004. We are an Equal Opportunity Employer, M/F/D/V.



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## ENVIRONMENTAL SCIENTIST Ph.D. SR. PROJECT SCIENTIST

Metcalf & Eddy is a leading professional services and environmental consulting firm with offices throughout the nation and the world. We are seeking an experienced professional for this position at our Wakefield, MA, office.

Qualified candidates will have a Ph.D. in Biological Sciences, Ecology, or Wildlife Management, and 5+ years' consulting work experience beyond the Ph.D. Background should include preparing ecological risk assessments, large EISs/EAs, demonstrated technical project management and execution, and writing skills. Certification by the Ecological Society of America as a Senior Ecologist and specialized training in conducting ecological risk assessments would be desirable.

Metcalf & Eddy offers a salary commensurate with experience and a comprehensive benefits package. For consideration, please forward your resume and salary history to: Dept. 3895C, Metcalf & Eddy, 30 Harvard Mill Square, Wakefield, MA 01880.

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### NEUROSCIENTIST POSITIONS

The Department of Anatomy and Neurobiology at Colorado State University has tenure track openings for three neuroscientists at the level of Assistant Professor or higher. The Department is an integral part of the campus-wide Program in Neuronal Growth and Development. Successful applicants will contribute to Department and Program teaching, which includes courses in the undergraduate, graduate and professional veterinary medicine curricula. Areas of teaching need include developmental neurobiology, human gross anatomy, neuroanatomy and related areas.

Successful applicants will be expected to maintain an extramurally-funded research program. The applicants' research should complement interests of the Department and Program which include structure and function of membrane receptors and ion channels; neural integration, particularly at the cellular level; and disorders of the nervous system. Preference will be given to applicants whose research employs techniques of molecular biology or digital imaging.

Closing date for applications is October 15, 1995; the search may be extended. Preferred start date July 1996. Send CV and names of three references to: Chair, Search Committee, Department of Anatomy and Neurobiology, Colorado State University, Fort Collins, CO 80523. CSU is EEO/AA employer. E.O. Office: 25 Spruce Hall, Fort Collins, CO 80523.

## CLINICAL DIRECTOR NIEHS



NIEHS' Intramural Program is seeking a tenured Clinical Director to conduct independent clinical research and direct NIEHS' clinical research activities. The successful candidate will be responsible for developing clinical research programs to study the environmental component of diseases and dysfunctions; facilitating and evaluating collaborative clinical research between intramural investigators; and ensuring that optimal medical care is provided to all patients participating in NIEHS' protocols through the institute's clinical contracts with Duke and the University of North Carolina. Salary range to \$148,400 depends upon qualifications, with relocation expenses available. The position must be filled by a physician. Applicants with certification in internal medicine, gynecology, oncology or other specialties, and demonstrated research and clinical excellence are encouraged to call 919-541-3317 or write Norma Daye, Human Resource Management Branch (HNV115), NIH/NIEHS, MD 1-01, P. O. Box 12233, Research Triangle Park, NC 27709 to request an application package. **Complete application packages** must be returned to Norma Daye at the above address postmarked by November 7, 1995 to receive consideration.

NIH is an Equal Opportunity Employer; applications from women, minorities and persons with disabilities are strongly encouraged.



# STONY BROOK

STATE UNIVERSITY OF NEW YORK

## Faculty Position Molecular Genetics and Microbiology

The Department of Molecular Genetics and Microbiology seeks applicants for a tenure track or tenured position at the assistant professor or associate professor level in the field of signal transduction in eukaryotic model systems, including yeast and animal cells. Investigators (MD or PhD) with a record of productive research in signal transduction are encouraged to apply. Areas of signal transduction research relating to cancer or infectious disease are preferred. The position offers significant scientific resources. Applicants should send curriculum vitae and research plans and arrange to have three letters of reference sent to Dr. Paula J. Enrietto, Search Committee, Department of Molecular Genetics and Microbiology, State University of New York Stony Brook, NY 11794-5222. Applications should be received by Sept. 30, 1995 and will be considered as they are received.

SUNY at Stony Brook is an Equal Opportunity/Affirmative Action Employer.

7058-NAT



## THE UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER

### FACULTY AND POSTDOCTORAL POSITIONS: NEUROBIOLOGY OF PAIN AND NEURONAL REGENERATION

The Pain Research Program at the University of Texas Southwestern Medical Center is committed to a period of expansion, focusing on the molecular and cellular mechanisms of pain, neuronal injury and nerve regeneration. We are seeking applications for **Associate** or **Assistant Professor positions**. A candidate must be an accomplished scientist and leader in the neurophysiology and neuropharmacology of the spinal cord and peripheral nervous system. A Ph.D. and/or M.D. degree with at least 5 years of research experience, a record of publications in peer-reviewed journals and expertise in procuring research support is required.

**Postdoctoral positions (4)** are available in the fields of somatosensory transduction, peripheral nerve regeneration, molecular biology of neuronal regeneration, biochemistry and pharmacology of spinal nociception and analgesia, molecular biology of anesthetic mechanisms, and behavioral analgesic research. A Ph.D. in neurobiology, molecular biology or a related field is required.

Interested applicants should send a copy of their curriculum vitae and names of three references to:

**Darrell L. Tanelian, Ph.D., M.D.**  
Director, Pain Research Program  
Department of Anesthesiology and Pain Management  
The University of Texas Southwestern Medical Center  
5323 Harry Hines Blvd.  
Dallas, TX 75235-9068

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## THE UNIVERSITY OF TEXAS AT AUSTIN seeks applicant for the position of DIRECTOR OF THE MARINE SCIENCE INSTITUTE

The Marine Science Institute is a research and teaching facility located on the Gulf of Mexico at Port Aransas, Texas. The Texas coastal zone, which includes vast lagoons, wetlands, estuaries and the warm waters of the gulf to the edge of the Continental Shelf, provides a rich environment supporting research in marine sciences. The Institute has excellent modern facilities including 180,000 square feet of laboratories, a library, a conference center, and visitor housing, as well as several research vessels including the R/V LONGHORN, a member of the UNOLS fleet. The Institute functions in conjunction with the Department of Marine Science, one of 12 academic units of the College of Natural Sciences of The University of Texas at Austin. The Department offers programs leading to the M.A. and Ph.D. in Marine Science and currently includes 15 faculty and 30 graduate students. In addition, approximately 85 scientific and support staff participate in the diverse research projects at the Institute.

The Director is the chief executive officer of the Institute and is expected to provide vision and leadership in research as well as to administer the academic and research programs of the Institute, and to communicate with the private sector. He or she also serves as Chairperson of the Department of Marine Science and holds the Nancy Lee and Perry Bass Regents Chair in Marine Science, an endowment for support of the research endeavors of the Institute. The Director reports to the Provost of The University through the Dean of the College of Natural Sciences.

We are seeking a congenial, dynamic leader with outstanding abilities in research, administration, and communication. Candidates with these qualities and an interest in promoting the diverse research and academic activities of the Institute are urged to apply. The successful candidate must qualify for appointment to the rank of Professor with tenure in the Department of Marine Science.

Candidate selection will begin September 15 and the search will remain open until an appointment is made. Applications should include a letter of interest, curriculum vitae, and the names and addresses of five references. This material should be sent to the Office of the Dean, College of Natural Sciences, The University of Texas at Austin, Austin, Texas 78712.

*The University of Texas at Austin is an equal opportunity and affirmative action employer.*

## First Annual Conference on Recruitment and Retention of Minority Scientists

### Unlocking Opportunities: Fostering Diversity in the Scientific Workforce in the Pharmaceutical and Biomedical Industries

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This is a unique opportunity to be part of an exciting forum where professionals from industry, government, universities and associations will discuss and share strategies related to the recruitment, retention and professional development of minority scientists.

**Sponsored By:** The American Association for the Advancement of Science  
**Location:** Washington D.C.  
(Crystal City Marriott, Arlington, Virginia)

**Scheduled Speakers:** John H. Gibbons, Anne C. Petersen, Ruth L. Kirschstein, Manuel Gomez, Marcellus Grace, Norbert Hill, Jean Jackson-Swopes, Joyce Justus, Shirley Malcom, Clifton A. Poodry, Clay E. Simpson, Jr., Thomas E. Smith, David Wheadon, Luther S. Williams, Lynne Cannon, Norman L. Fortenberry

Price includes full conference, opening cocktail reception, continental breakfast and lunch; does not include hotel accommodations.

**For information call:** Janis Crowley (212) 496-7704  
An activity of Science Linkages in the Community (SLIC) and supported by a grant from the DeWitt Wallace-Reader's Digest Fund.



## THE NATIONAL RESEARCH COUNCIL

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- 3 annual award competitions for most participating laboratories

Applications accepted on a continuous basis throughout the year. Those postmarked by January 15 will be reviewed in the February competition, by April 15 in June, and by August 15 in October.

For application materials and information on participating laboratories contact:

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(TJ-2114/S4)

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Qualified applicants will be reviewed without regard to race, creed, color, age, sex or national origin.

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Packard Instrument Company, a leader in the design and manufacture of medical research equipment, seeks a Senior Applications Scientist to join its dynamic Marketing Department.

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A Ph.D. in Biochemistry or related field with at least 2-3 years' laboratory experience in assay development or drug discovery screening is required. Master's level scientist with extensive demonstrated experience may be considered. Candidates must possess detailed knowledge of biological assays (enzyme-substrate, receptor-ligand, protein-protein, hybridization) and be expert at handling biologicals (proteins, nucleic acids, antibodies). The successful candidate must be available to work in our international lab as required.

If you qualify and desire a challenge, please send your resume, with salary requirements to: **Debbie Tolla, Packard Instrument Company, 800 Research Parkway, Meriden, CT 06450.** Equal Opportunity Employer M/F/V/H.



### TOXICOLOGIST

**STERITECH**, a fast-growing San Francisco bay area biopharmaceutical company, has an immediate opening for a toxicologist with whole animal testing experience. Toxicologist's responsibilities are predominantly administrative (oversee/assist in monitoring GLP studies conducted by contract research labs) and approximately 20% research or lab projects (plan and conduct in-house *in vivo* tertiary screening).

Qualifications required include a Ph.D. or M.S. in toxicology, pharmacology or related area and post-graduate experience in general toxicology (2 years for Ph.D. level or 5 years for M.S. level). Genetic toxicology and pharmaceutical industry/contract lab experience desirable.

Steritech offers excellent salaries/benefits, including 401(k), stock options and medical/dental plans. Send CV or resume, three professional references and salary history to: **Toxicologist, Steritech, Inc., 2525 Stanwell Dr. #300, Concord, CA 94520.** Applicants only.

EEO.

### Pharmaceutical Dosage Form Development

Senior Scientist to Director Level

Cato Research, Ltd., is a contract research organization which engages in pharmaceutical product development and FDA registration on behalf of clients in the pharmaceutical and biotechnology industry. We are looking for experienced professionals who have expertise in the following areas:

- ▼ Pharmaceutical Dosage Form Development
- ▼ Analytical Chemistry Development
- ▼ Sterile Products/Biologics

Minimum requirements include a Ph.D. in Pharmacy, Analytical Chemistry, or Biology and at least 5 years of recent hands-on experience in a U.S. pharmaceutical company. These are non-laboratory opportunities requiring the ability to direct, coordinate, and manage complex CMC and dosage form development. Experience in sterile products and biologics is a strong plus, but not required. Knowledge of GMP, IND, NDA, and PLA requirements is essential.

For consideration, please send your resume to: **PD/SEC, Cato Research Ltd., 4364 S. Alston Ave., Suite 201, Durham, NC 27713-2280.** No phone calls or third party agencies, please. EOE.



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NYU Medical Center fully and actively supports and promotes equal opportunity employment in all of our employment practices for all people, regardless of race, color, creed, gender, national origin, disability, veteran status, marital or parental status, citizenship status, sexual orientation, or age.

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## **Lecturer (Level B) (Tenurable)**

### **ENTOMOLOGY DEPARTMENT**

The Department of Entomology is pleased to offer a full-time tenurable position in Insect Molecular Biology, with an emphasis on Physiology, Genetics of Development, Neural Function and/or Feeding Biology.

The responsibilities of the successful applicant will include: (1) development of an active research program and publication of research results in international journals; (2) development of an undergraduate subject in Insect Physiology and subjects related to her/his areas of research expertise; (3) collaboration with other researchers within the Department and the Centre for Tropical Pest Management and (4) training postgraduate students at the Honours, Masters and PhD level in her/his area of expertise.

The University of Queensland has become one of the premier Australian institutions in biological science research. We anticipate that the successful applicant will develop close ties with a number of departments and research centres at The University of Queensland, such as the Department of Biochemistry, Centre for Microscopy and Microanalysis and the Centre for Molecular and Cellular Biology.

The position requires a PhD in Entomology with experience in Insect Physiology. Undergraduate teaching experience and evidence of an ability to structure subjects are an advantage to the application. Postdoctoral experience is preferred. Applications should demonstrate an active research program and an ability to work with others on complex projects. Further details are available from the Head, Department of Entomology, The University of Queensland, Brisbane Qld 4072 Australia. Telephone +61-7-365-2271, facsimile +61-7-365-1922, email address g.gordh@mailbox.uq.oz.au. The Department's strengths and a profile of students, staff and curriculum are available on World Wide Web. Our WWW home page address is: <http://www.uq.oz.au/entomology/home.html>.

Salary \$A42,198 – \$A50,110 per annum.

Eight copies (original plus seven copies) of both application and a curriculum vitae, quoting **Reference No. 36495**, with the names, addresses and facsimile numbers of three (3) people who could be contacted for references, should be forwarded to the Director, Personnel Services, The University of Queensland, Brisbane Qld 4072 Australia. Closing date: 1 September 1995

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## **Postdoctoral Position for Behavioural Pharmacologist**

A position is offered for a 2-year postdoctoral fellowship. The task consists in implementing behavioural models/paradigms employing instrumental/classical conditioning techniques in the discovery and development of drugs to alleviate psychiatric and neurodegenerative disorders.

The ideal candidate should meet the following requirements: Ph.D. awarded or very near completion; good theoretical and practical background in behavioural pharmacology using instrumental/classical conditioning procedures (e.g. latent inhibition, conditioned reinforcement, matching-to-sample tasks).

For further information, please contact Dr. Kevin McAllister on (0)31 377 67 07 (Berne/Switzerland).

Applications should be addressed to

**Sandoz Research Institute Berne Ltd., attn.  
Mr. U. Kaufmann, P.O. Box, CH-3001 Berne**

 **SANDOZ**



**FOUNDATION FOR  
RESEARCH, SCIENCE AND TECHNOLOGY**

*Tūāpapa Toha Pūtea, Whakatakoto Kaupapa Rangahau, Pūtaiao*

## **POST-DOCTORAL FELLOWSHIPS**

Applications can now be made to the Foundation for Research, Science and Technology for the NZ Science & Technology Post-Doctoral Fellowships for 1996. The scheme provides early career support for New Zealand scientists, engineers and social scientists of outstanding talent, for post-doctoral research either locally or overseas.

Fellowships will have a maximum value of NZ\$70,000 (including GST) per year; the stipend will on average be NZ\$50,000 (including GST) with a contribution to the costs incurred by an organisation hosting a Fellow. Fellowships tenable in overseas countries will have an overall value that reflects costs of working in the particular country.

Applications must be received by 11 September 1995, on the application form available from the Foundation. Please contact:

**Foundation for Research, Science and Technology**  
P O Box 12-240 Wellington New Zealand  
Tel: 64-4- 499 2559 Fax: 64-4- 499 2568

## POSITIONS OPEN

### RESEARCH SCIENTIST Integrated DNA Technologies

This new position will join a rapidly expanding research program developing DNA probe diagnostic systems and antisense oligonucleotides. The appointee will take a major role in coordinating the research effort, and will have facilities to cultivate ongoing research interests. The appointee must have a Ph.D. with a strong background in molecular biology and biochemistry including DNA sequence analysis and database management. Salary will be commensurate with qualifications.

Integrated DNA Technologies, Inc. is located near major university medical and research centers. Please send curriculum vitae with list of publications, a letter of interest outlining relevant areas of expertise and two letters of recommendation to: **Integrated DNA Technologies Inc., Research Scientist Search Committee, 1710 Commercial Park, Coralville, IA 52241.**

*Equal Opportunity Employer. Women and minorities are encouraged to apply.*

The Center for Conservation Research and Training at the University of Hawaii is seeking an **ADMINISTRATIVE ASSISTANT** (Position No. 086165T) to function as coordinator of the Secretariat for Conservation Biology dedicated to increasing the contributions of science to the conservation of native Hawaiian ecosystems, and to facilitate cooperation among researchers, educators and resource managers. Applicants must have M.S. in appropriate area of biology plus at least three years of successful work experience in a related area with background in management and administration. Send letter of application, curriculum vitae, and three letters of recommendation to: **Dr. Ken Kaneshiro, Director, CCRT, University of Hawaii, 3050 Maile Way, Honolulu, HI 96822** by September 30, 1995. **FAX: 808-956-9608.** Approximate start date, January 1, 1996. *Affirmative Action/Equal Opportunity Employer.*

**ACADEMIC COORDINATOR II**—Introductory Biology. Applications are invited for a position in the Section of Evolution and Ecology, Division of Biological Sciences, University of California, Davis, effective 1 July 1996. Ph.D. in biological sciences and extensive experience in teaching laboratory sections required. Position involves assisting instructors and coordinating teaching assistants and laboratories for course Biological Sciences 1B (Introductory Biology), directing a TA training course, and involvement in course improvement in Biological Sciences 1B and the Biological Sciences 1B Learning Center.

Position open until filled. Applications should be received by 15 October 1995 to receive full consideration. Applicants should send a letter of application and curriculum vitae, and have two letters of recommendation sent to: **Judy Stamps, Vice Chair, Section of Evolution and Ecology, University of California, Davis, CA 95616-8755.** *The University of California is an Affirmative Action/Equal Opportunity Employer.*

## ANNOUNCEMENTS

### RESEARCH ASSOCIATES IN SPACE BIOLOGY

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## ANNOUNCEMENTS



### RESEARCH GRANTS

The American Health Assistance Foundation invites applications from researchers at non-profit institutions for the following programs:

**Alzheimer's Disease Research:** grant awards of up to \$100,000 per year for up to two years (renewable) for research into the causes and treatment of Alzheimer's disease. Application deadline: October 15, 1995.

**Glaucoma Research:** grant awards of up to \$25,000 per year for up to two years (renewable) for research into the causes and treatment of glaucoma. Application deadline: November 30, 1995.

**National Heart Foundation Grants:** starter grants of up to \$15,000 for one year (renewable) for research into the cause and treatment of stroke or cardiovascular disease. To qualify for a starter grant, the investigator must be an assistant professor (or equivalent) beginning an independent research career. Application deadline: October 31, 1995.

For information and application forms contact: **Research Grants Department, American Health Assistance Foundation, 15825 Shady Grove Road, Suite 140, Rockville, MD 20850.** Telephone: 301-948-3244.

### CONTAMINATED SOILS CONFERENCE October 23 to 26, 1995

The University of Massachusetts at Amherst will host the 10th Annual Conference on Contaminated Soils. This year's conference sessions include: federal issues, radionuclide contamination, railroad/diesel, analysis, site assessment, environmental fate, remediation, risk-based corrective action, risk-based cleanup standards, state regulatory issues, site closure, human health risk assessment and effects, and ecological risk assessment. For more information please contact Linda Rosen at 413-545-2934.

## SYMPOSIA

### MATHEMATICS AND MOLECULAR BIOLOGY IV From DNA Sequence to Protein Structure and Function

Santa Fe, New Mexico, November 11 to 15, 1995. Limited travel funds available; students have priority. Abstract deadline: September 15, 1995.

For information: **Dr. S. J. Spengler, Mathematics & Molecular Biology, 103 Donner Laboratory, No. 3206, University of California at Berkeley, Berkeley, CA 94720-3206.** FAX: 510-642-4071; Email: sylviaj@violet.berkeley.edu.

**SYMPOSIUM:** Translation & Stability of mRNA. October 8 to 10, 1995, Cathedral Hill Hotel, San Francisco, California. Speakers: E. Baker, H. Blau, R. Braun, A. Geballe, P. Green, J. Harford, J. Hershey, A. Hinnebusch, M. Katze, R. Lehmann, M. Mathews, D. Morris, R. Parker, S. Peltz, G. Read, T. Rouault, A. Sachs, P. Sarnow, R. Schneider, A. Shyu, R. Silverman, N. Sonenberg, O. Uhlenbeck, S. Warren, M. Wickens. Organizers: J. Harford, RiboGene; M. Katze, University of Washington; J. W. Larrick, PAIMM. Abstracts due August 31, 1995. Sponsor: Palo Alto Institute of Molecular Medicine, 2462 Wyandotte Street, Mountain View, CA 94043. Telephone: 415-694-4996; FAX: 415-694-7717; Email: PAIMM@AOL.COM.

## MEETING

Annual meeting of The Oxygen Society, Ritz-Carlton Huntington Hotel, Pasadena, California. Workshop on Nitric Oxide, November 17 to 20, 1995: (transcriptional regulation; inflammation; metalloproteins; redox reactions; cell injury/clinical studies; antioxidant defenses and novel therapeutics; toxicology; photochemistry; lipid/protein/DNA oxidation). Contact: **Kimberly Loffer, 74 New Montgomery, Suite 230, San Francisco, CA 94105-3411.** Telephone: 415-546-3124; FAX: 415-764-4915.

## ♀ ANNOUNCEMENTS ♀

### POSTDOCTORAL SCIENCE FELLOWSHIPS

The Mary Ingraham Bunting Institute of Radcliffe College, a multidisciplinary research center, offers **FELLOWSHIPS** for women scholars, scientists, artists, and writers. Office space, auditing privileges, and access to libraries and most other resources of Radcliffe College and Harvard University are provided. Residence in the Boston area and participation in the Institute community are required during fellowship appointment. Applicants must have held the Ph.D. or appropriate terminal degree for at least two years prior to appointment. **Science Scholars Fellowship Program** (Funded by the Office of Naval Research. Applicants must be U.S. citizens) is open to women in fields of astronomy, molecular and cellular biology, biochemistry, chemistry, cognitive and neural sciences, computer science, electrical engineering, aerospace/mechanical engineering, geology, materials science, mathematics, physics, naval architecture and ocean engineering, oceanography, and all fields that relate to the study of oceans. **Biomedical Research Fellowship Program** (Funded by the Office of the Burroughs Wellcome Fund. Applicants must be U.S. citizens or permanent residents) is open to women in all fields of biomedical research. Stipends are \$34,200 plus \$3,000 in research expenses for eleven-month appointment, September 15, 1996 to August 15, 1997. Application deadline: October 15, 1995 (postmarked). Write or call for application: **34 Concord Avenue, Cambridge, MA 02138.** Telephone: 617-495-8212. Email: [Bunting\\_fellowships@radcliffe.harvard.edu](mailto:Bunting_fellowships@radcliffe.harvard.edu).

### MILLS COLLEGE

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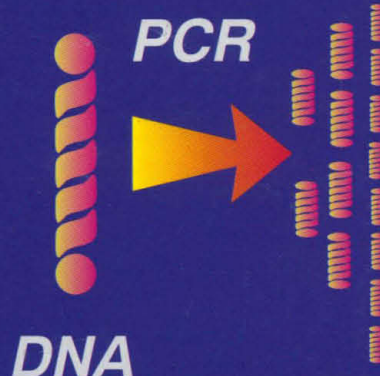
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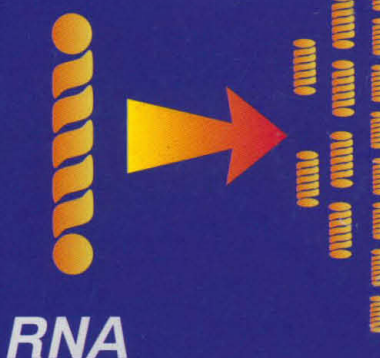


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