# The nucleic acid labeling source

Ambion is your source for innovative kits for all your nucleic acid labeling needs

## **NEW!** Kinase Max™

5' End Labeling Kit produces 1.5-3 times the yield than kits utilizing standard kinase buffers.

## **DECAprime™** II

For high specific activity DNA labeling with the random priming method. Fast five minute reaction maximizes probe yield and specific activity.

## **NEW! Prime-A-Probe™**

For strand specific DNA probe synthesis. The kit utilizes specific primers and your linearized plasmid DNA to produce high specific activity probes for S1, Southern or Northern assays.

Contact us today for information on our full range of nucleic acid labeling kits for your specific applications.

(512) 445-6979 (512) 445-7139 FAX

(800) 888-8804



**Innovative Products for RNA Analysis** 

Circle No. 33 on Readers' Service Card
Electronic Marketplace: http://www.aaas.org

## PRODUCTS & MATERIALS

## **DNA Quantitation Kit**

The Beacon DNA Quantitation Kit contains a fluorescent dye that selectively binds to double-stranded DNA, producing an amplification of fluorescence intensity of the dye. The method allows specific quantitation of double-stranded DNA, with minimal detection of single-stranded nucleic acids. The procedure involves generating a standard curve by serially diluting a DNA standard. A best-fit line is then constructed by linear regression and used to determine the DNA concentration of unknown samples. The kit can be used to generate both high (3 to 200 ng) and low (0.098 to 25 ng) DNA standard curves. PanVera. Circle 139.

## **Antibodies**

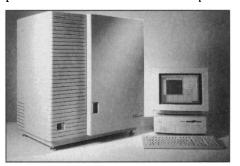
Antibodies for the study of proteins involved in cell adhesion include antibodies to the catenins ( $\alpha$ ,  $\beta$ , and  $\gamma$ ), E-cadherin, P-cadherin, cadherin-5, cadherin-11, desmoglein, and L1 glycoprotein. The antibodies can be used in protein immunoblotting and imunocytochemistry. **Transduction Laboratories**. Circle 140.

A full line of purified polyclonal cytokine antibodies includes antibodies against IL-1 $\alpha$ , IL-1 $\beta$ , IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-10, IL-13, IL-15, EGF, FGF- $\beta$ , GM-CSF, IGF-I, IGF-II, IFN- $\alpha$ , IFN- $\gamma$ , MCAF, MIP-1 $\alpha$ , RANTES, TGF- $\alpha$ , TNF- $\alpha$ , TNF- $\beta$ , and VEGF. Murine polyclonal cytokine antibodies are available for IL-1 $\alpha$ , IL-1 $\beta$ , IL-3, IL-4, IL-6, GM-CSF, and TNF- $\alpha$ . CytImmune Sciences. Circle 141.

## **DNA Sequencer**

The ABI PRISM 377 DNA Sequencer produces genetic information four times faster than previous technology for sequencing, linkage, and mapping projects, according to the manufacturer. The new sequencer can collect data at rates of up to 7200 bases per hour, compared with 1800 bases per hour for its predecessor. The sequencer's new user in-

terface streamlines data collection and analysis with fast, efficient gel pouring and handling. The new instrument requires thinner gels and less sample. It accommodates 12-, 36-, and 4-cm well-to-read lengths. By adjusting speed in combination with gel length and resolution, users can optimize performance to match their DNA sequenc-



ing and fragment analysis requirements precisely. Perkin-Elmer. Circle 142.

## Pharmacokinetic Data Analysis Software

PKAnalyst is a Windows update of the RSTRIP pharmacokinetic software program. New features include hypertext-based online help, three-dimensional line and surface plotting, more intuitive graphics interaction, and a more powerful text editor. It has more than 2 dozen pharmacokinetic models built in. It can calculate micro-rate constants for compartmental models, analyze saturable kinetics, handle bolus and zero- or first-order input for finite and infinite time periods, simulate pharmacokinetics with multiple dosing, or with both bolus and infusion occurring together, and produce concentration/effect Sigmoid-Emax diagrams. MicroMath Scientific Software. Circle 143.

## **DNA Elution from Agarose Gels**

Two new methods for elution of DNA from agarose gel blocks using Ultrafree-MC centrifugal filters are the 5-min method and the

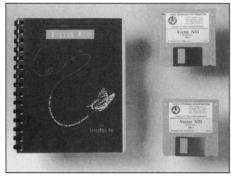
Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by *Science* or AAAS is not implied. Additional information may be obtained from the manufacturers or suppliers named by circling the appropriate number on the Readers' Service Card and placing it in a mailbox. Postage is free.

maximum recovery method. The 5-min method is a fast, one-step procedure involving a 5-min spin at 5000g. The only equipment required is a variable-speed microcentrifuge. The method is best for recovery of small fragments (<2.0 kbp). The maximum recovery method involves freezing, thawing, and maceration of the gel slice combined with a single spin, which gives a greater recovery of both small and large DNA fragments. Millipore. Circle 144.

**Cloning Software** 

Vector NTI is knowledge-based software designed to automate many cloning applications. It is capable of designing new genetic molecules automatically, making use of the user's specifications for the desired molecule. The software contains more than 3000 rules for genetic engineering designing. The new version includes a database of 80 commonly used vectors and permits transferring changes to molecules in child-parent trees and visualization of those changes. Additional features include a more powerful sequencer and the ability to choose any number of best options for new molecule design.

All molecules can be analyzed to identify sequences for polymerase chain reaction primers, restriction sites, open reading



frames, and sequence motifs. Versions are available for Windows and Macintosh systems. InforMax and American Type Culture Collection. Circle 145.

## Literature

1995 Research Products Catalog features more than 800 products for signal transduction, oncogene, tumor suppressor gene, neuroscience, and cardiovascular research. It introduces new antibodies, peptides,

probes, proteins, and more. Oncogene Science. Circle 146.

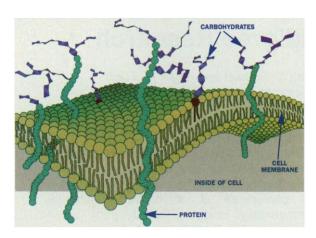
1995 Product Catalog of Microbiology contains more than 2300 product descriptions, including dehydrated culture media for molecular genetics, a blood culturing system, and a system for mycobacterial growth and detection. Difco Laboratories. Circle 147.

Maintain Sample Integrity with Hamilton's SampleLock Syringes describes the use and applications of these products, including sample collection and storage, sample prepressurization, sample spiking, and purge and trap sample loading. Hamilton. Circle 148.

Gibco BRL Baculovirus Expression Products details the features and advantages of this line. Life Technologies. Circle 149.

Viable Colostrum Based Medium Supplement is an eight-page brochure on an alternative to fetal bovine serum with advantages that include low bovine protein content, minimal variation between batches, low endotoxin content, no harmful viruses, low viscosity, and low fat content. Accurate Chemical and Scientific. Circle 150.

## Need Carbohydrate Analysis?



## If you're ready to work with carbohydrates

but find yourself limited by time, lab personnel or expertise level, Glyko can help.

Working with FACE,® our proprietary Fluorophore Assisted Carbohydrate Electrophoresis technology, Glyko scientists can separate, quantify, sequence, and characterize your carbohydrates for you.

We offer routine and custom carbohydrate analytic services, both of which feature responsive turnaround, reasonable pricing, and the highest level of carbohydrate expertise.

## STANDARD ANALYTIC SERVICES

## ■ PROFILING

of N-linked and O-linked oligosaccharides from glycoproteins as well as glycosphingolipid oligosaccharides

## ■ COMPOSITION DETERMINATION

of monosaccharides including glycoproteins, isolated oligosaccharides, and glycosaminoglycans

## ■ SEQUENCING

of N-linked and O-linked oligosaccharides from glycoproteins as well as glycosphingolipid oligosaccharides

## **CUSTOM ANALYTIC SERVICES**

- GLYCOPROTEINS
- POLYSACCHARIDES
- GLYCOSAMINOGLYCANS
- GLYCOLIPIDS
- FOOD/BEVERAGE MATERIALS
- INDUSTRIAL MATERIALS

Whether your research requires a standard or special carbohydrate analysis, think of Glyko as your carbohydrate research partner.

We can assist you for one-time, carbohydrate identification to define your molecule.

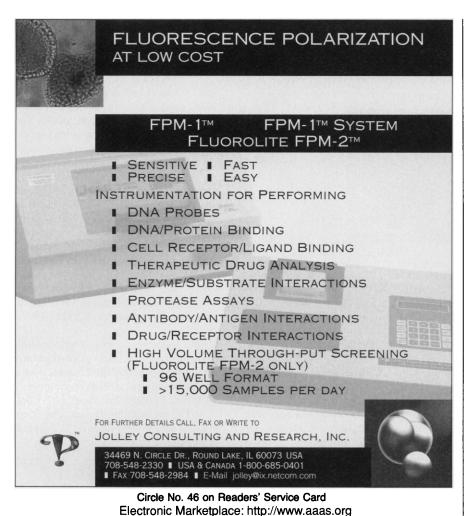
Or, we can contract with you on a long term basis for special custom analyses. Our custom services clients include the pharmaceutical, chemical, food and beverage, biotechnology, and cosmetics industries. Please call to determine if we can help with your specific project.

For more information about Glyko Analytic Services, our products, and international distributors call toll free: **1 800 33 GLYKO** (334 5956) *U.S. only*, phone: 1 415 382 6653, fax: 1 415 382 7889, or write to us at 81 Digital

Drive, Novato, CA 94949.



©1995 GLYKO, INC. FACE IS A REGISTERED TRADEMARK OF GLYKO, INC.



1995 - 1996
PRODUCT
CATALOG

Peptide Antisera • Radiolabeled Peptides
Secondary Antibodies • RIA Kits
Immunofluorescence Kits • Assay Buffers

Biologically Active Peptides • Inhibitors

Boc, Fmoc, Ddz & Z Amino Acids Unusual Amino Acids Amino Acid Derivatives • Amino Acid Alcohols

Complete Line of Synthesis Reagents 2-Chlorotrityl Resins • Linkers and Spacers MAP Resins • TentaGel S® Resins MBHA and Merrifield Resins

AND MANY MORE

ONE CATALOGONE SOURCE

## Advanced ChemTech

5609 Fern Valley Rd, Louisville, KY 40228 800 456 1403 or 502 969 0000 Fax: 502 968 1000



Circle No. 43 on Readers' Service Card Electronic Marketplace: http://www.aaas.org

## SSR

## Molecular Biology Into the 21st. Century

Providing:

- Custom Oligo Synthesis \$1.50 Base
  - DNA Sequencing Single Pass

Shotgun

Fully Documented

Fast Turn-around Cost Effective Reliable

SOUTHWEST SCIENTIFIC RESOURCES 5300 Sequoia NW, Suite 150 Albuquerque, NM 87120

Phone: 1 (800) 343-8998 Fax: (505) 831-2635

Circle No. 48 on Readers' Service Card Electronic Marketplace: http://www.aaas.org

## Ethical and Legal Issues in Pedigree Research

Editors: Mark S. Frankel and Albert H. Teich AAAS Directorate for Science and Policy Programs

Studies using family pedigrees have played a key role in determining how genetic disorders are inherited and in locating the genes associated with these disorders. Such studies raise ethical and legal issues that have yet to be thoroughly aired. This volume reports on an invitational conference at which the participants, including researchers studying five different genetic disorders, discussed how their research groups and others are handling such issues as informed consent, subject recruitment and withdrawal, privacy and the control of genetic information, children as research subjects, the role of researchers and the provision of clinical care, and publication practices.

To order please send \$10.00 plus \$2.00 for shipping and handling to:

AAAS (Attn. Kamla Butaney)
Directorate for Science and Policy
1333 H Street, NW
Washington, DC 20005.

California and DC residents add sales tax; Canadian residents add 7% GST; and foreign mail add 25% of total.

## Science

## PERSONNEL PLACEMENT

## LINE CLASSIFIED ADVERTISEMENTS

**Deadlines:** Ads are due by Thursday, 10 a.m., 2 weeks prior to the issue date. *Science* is published each Friday, except the last Friday of the year. Call for holiday deadlines. Ads must be submitted in writing.

### How to Submit a Classified Ad:

Prepare double-spaced typewritten copy. Do not include any abbreviations. *Science* will edit and typeset ads according to *Science* guidelines. Include billing information, and desired publication date. Available categories: Positions Open, Meetings, Announcements, Courses and Training, Search Firms. *Science* cannot provide proofs of typeset line ads.

## Mail, FAX or Email materials to:

Science Classified Advertising 1333 H Street, N.W., Room 814 Washington, DC 20005 Telephone: 202-326-6555 FAX: 202-682-0816

Internet Email: science\_classifieds@aaas.org (please include telephone number in email correspondences)

Rates: Ads are \$43 per line; \$430 minimum. One line equals 52 characters and spaces; centered headings equal 32 characters and spaces. A 3% cash discount is granted to all prepaid ads. Line advertisements are not commissionable.

Estimates: Science will provide a cost estimate for line ads. This is an approximate cost only. Allow for variation between estimated lines and actual typeset lines and resulting final cost. Purchase orders must allow for some degree of flexibility and/or adjustment.

Ads from Outside the U.S.: A discount of \$30 will be offered to advertisers making payment in U.S. dollars by checks drawn on U.S. banks. Contact Gordon Clark at +44 1223 302 067 (telephone) or +44 1223 576 208 (FAX).

**Credit Cards:** Science accepts American Express, MasterCard and VISA. Discount does not apply to credit cards.

**Cancellations:** Deadline for cancellation is 10 a.m., Tuesday,10 days prior to issue date.

## DISPLAY PERSONNEL ADVERTISEMENTS

For rates and info. for fractional display ads call:

Bethany Ritchey Recruitment Display Advertising Telephone: 202-326-6541 FAX: 202-682-0816

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

Gordon Clark European Recruitment Advertising Telephone: +44 1223 302 067 FAX: +44 1223 576 208

Science Global Career Network: Unless otherwise instructed, every classified advertisement submitted for publication in Science is automatically posted on Science's on-line classified advertising service, Science Global Career Network, at no additional charge. Science Global Career Network address:

Gopher: gopher.aaas.org
WWW: http://www.aaas.org
Science reserves the right, at its discretion, to edit
or decline to publish advertisements submitted to it

## **POSITIONS OPEN**

### ASSISTANT PROFESSORS OF ZOOLOGY

The University of Idaho's Department of Biological Sciences invites applications for two TEN-URE-TRACK POSITIONS from candidates with a Ph.D. and postdoctoral experience. The specific areas for which August 1996 openings are anticipated are: 1) Mammalogist/Ornithologist. Teaching responsibilities will include general zoology and mammalogy/ornithology; 2) Fish Biologist. Teaching responsibilities will include ichthylology and invertebrate zoology.

Appointments will be at the assistant professor level. Successful candidates will be expected to have a keen interest in undergraduate instruction, to establish extramurally funded research programs and to supervise research at the une organizate, Master's, and doctoral levels. Applications will be reviewed if received by October 20, 1995.

Applicants should send a statement of research goals, teaching philosophy, curriculum vitae and the names and telephone numbers of three references to: Julie Monroe, Secretary to the Search Committee, Department of Biological Sciences, University of Idaho, Moscow, ID 83844-3051. Email: jmonroe@aspen.csrv.uidaho.edu; http://www.uidaho.edu/Letters\_and\_Science/BioSci/. To enrich education through diversity, the University of Idaho is an Equal Opportunity/Affirmative Action Employer.

### BIOLOGY FACULTY POSITION ASSISTANT PROFESSOR

King's College, Wilkes-Barre, PA, has a tenure-track opening as an ASSISTANT PROFESSOR of biology beginning with the Fall 1996 semester. An animal physiologist is sought. The successful applicant will hold the Ph.D. in Biological Science and is expected to teach undergraduate biology courses for majors and non-majors, as well as some area of neuroscience in the Biopsychology Program, and to supervise an active undergraduate research program. Previous undergraduate teaching experience is desirable. This position requires a primary interest and commitment to quality undergraduate instruction.

The Biology Department, housed in the new Parent Life Sciences Center with modern teaching and research laboratories and equipment, has an active Molecular Biology Program, is part of a Biotechnology Group in association with other departments in the College, has a growing Biopsychology Program, and a developing Environmental Science Program.

A letter of application, stating teaching and research interests, a curriculum vitae, academic transcripts, and three letters of professional reference should be submitted by candidates to: William A. Shergalis, Ph.D., Dean of Arts and Sciences, King's College, Wilkes-Barre, PA 18711 by November 3, 1995, when the initial screening of applications will begin. The process will continue until the position is filled. King's College, sponsored by Congregation Holy Cross, is an Equal Opportunity Employer.

## ASSOCIATE/FULL PROFESSOR Biochemistry/Molecular Biology/Cancer Research

The Department of Biochemistry and Molecular Biology and the Stanley S. Scott Cancer Center are seeking a candidate at a **SENIOR LEVEL** for a tenure-track position. Any relevant area of biochemical and molecular research is acceptable. The applicant is expected to bring along a currently active research program in his/her area of expertise. Previous evidence of translational research between basic and clinical cancer research is desirable, and plans to rapidly develop such interactions would be an advantage. The Stanley S. Scott Cancer Center, which has recently been awarded an NCI Planning Grant, provides an outstanding growth opportunity for scientists interested in cancer research. The successful candidate will teach in the Department of Biochemistry and Molecular Biology. Space, transition funds, salary, and fringe benefits present an extremely attractive package. Applicants should send a curriculum vitae, a brief description of future research plans, and the names of three references to: Wayne V. Vedeckis, Ph.D., Search Committee Chairperson, Department of Biochemistry and Molecular Biology, Louisiana State University Medical Center, 1901 Per-dido Street, New Orleans, LA 70112. LSU Medical Center is an Affirmative Action/Equal Opportunity Employer.

## **POSITIONS OPEN**

Plant Ecologist/Evolutionary Biologist. The W.K. Kellogg Biologic Station (KBS), Michigan State University (MSU), seeks applicants for an ASSISTANT PROFESSOR, tenure-track, nine-month position in the area of the evolutionary ecology of plants. The position will be joint with the Department of Botany and Plant Pathology. Individuals with interests in the areas of population biology, evolutionary ecology, or other closely related fields are encouraged to apply. A doctoral degree is required and preference will be given to candidates with postdoctoral experience. Candidates are expected to establish a strong, extramurally funded research program. The successful applicant will be expected to participate in the teaching of field and lecture courses at graduate and undergraduate levels, including one course annually on the MSU campus. Participation in the interdepartmental Ecology and Evolutionary Biology Program and graduate training program at the KBS is also expected. The position holder will have access to outstanding laboratory and field facilities at KBS and on campus. Closing date for applications is November 1, 1995. Applications, including a curriculum vitae, statement of research and teaching interests, and names of three references should be sent to:

Search Committee Chairperson W.K. Kellogg Biological Station 3700 East Gull Lake Drive Hickory Corners, MI 49060

MSU is an Affirmative Action/Equal Opportunity Institution.

### HAVERFORD COLLEGE

The Molecular, Cellular and Developmental Biology Department seeks a tenure-track faculty member at the ASSISTANT PROFESSORIAL rank for the fall of 1996. The successful applicant will teach introductory and advanced courses in the Biology Department on the structure and function of macromolecules. S/he will receive teaching credit for maintaining an active research program with extensive undergraduate engagement involving the study of an important cell biological problem at the level of macromolecular structure and mechanism of action. S/he will also be expected to participate actively in the teaching of non-scientists as well as students en-rolled in the interdisciplinary Area of Concentration in Biochemistry and Biophysics. Postdoctoral research experience is required. Please send curriculum vitae, statements of research plans (one to three pages) and of teaching interests, and three letters of recommendation by November 1, 1995 to: **Dr. Judy Owen, Biology Search, Haverford College, Haverford, PA 19041-1392**. *Haw*crford College, located 10 miles west of Philadelphia, is an Equal Opportunity/Affirmative Action Employer; women and minority candidates are especially encouraged to apply.

### DEPARTMENT OF BOTANY UNIVERSITY OF WASHINGTON Assistant Professor, Plant Ecology

ASSISTANT PROFESSOR, Department of Botany, University of Washington. Applicants are sought for a tenure-track position in Plant Ecology at the level of Assistant Professor. The successful candidate must be qualified to teach undergraduate and graduate courses in plant ecology and develop a rigorous, externally funded program. Emphasis on quantitative skills or modeling using experimental and/or theoretical approaches. Please send curriculum vitae, statement of teaching and research interests, and up to three publications, and arrange to have three letters of recommendation forwarded to: Dr. Roger del Moral, Chair, Search Committee, Department of Botany, University of Washington, Box 355325, Seattle, WA 98195-5325. Priority will be given to applications received by November 30, 1995. Position will be filled subject to availability of funding. The University of Washington is building a culturally diverse faculty and strongly encourages applications from women and minority candidates. Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR in behavioral neuroscience. The Neuroscience Program and the Psychology Department at Princeton University has a position open for the fall of 1996. The position involves teaching and research and is open to any area of neuroscience with an emphasis on behavior or function. Send curriculum vitae, a one-page research description, and three letters of recommendation to: Chair, Neuroscience Search Committee, Code B, Department of Psychology, Princeton University, Princeton, NJ 08544-1010. Deadline is November 1, 1995. Princeton University is an Equal Opportunity/Affirmative Action Employer.

### ASSISTANT PROFESSOR DEPARTMENT OF NEUROSURGERY

TENURE-TRACK position available for a Ph.D. or M.D./Ph.D. with experience and expertise in conducting laboratory research in molecular and cellular biology with specific emphasis in one or more of the following areas: signal transduction, tumor suppressor genes, tumor invasiveness, or molecular strategies for solid tumor therapy. Experience with brain tumors is encouraged but not required. Salary and benefits are highly competitive. Send curriculum vitae, summary of research interests, and references to: Raymond Sawaya, M.D., Professor and Chairman, Department of Neurosurgery, Box 64, University of Texas M.D. Anderson Cancer Center, 1515 Holcombe Boulevard, Houston, TX 77030.

Equal Opportunity/Affirmative Action Employer. Smoke-free environment.

### ASSISTANT PROFESSOR OF BIOCHEMISTRY

Applications are invited for a tenure-track faculty position at the **ASSISTANT PROFESSOR** level in the Department of Chemistry and Biochemistry at Utah State University. The successful applicant will actively participate in the Ph.D. degree program in biochemistry and will be expected to develop a nationally recognized research program that complements our existing faculty interests. Applicants working on metals and free radicals in protein and nucleic acid biochemistry are encouraged to apply. Teaching responsibilities will include undergraduate and graduate biochemistry and general chemistry courses. A Ph.D. degree and postdoctoral experience are required. A curriculum vitae, outline of planned research, statement of teaching philosophy and three letters of recommenda-tion should be sent to: **Biochemistry Search Commit**tee, Department of Chemistry and Biochemistry, Utah State University, Logan, UT 84322-0300. Review of completed applications will begin 31 October 1995 and will continue until the position is filled. Logan is located in the scenic Cache Valley, which offers rural and small city living adjacent to wilderness areas. Utah State University is an Equal Opportunity/Assimative Action Employer, and applications from women and minorities are encouraged.

## ECOLOGIST, BRYN MAWR COLLEGE

The Department of Biology invites applications for a tenure-track position at the ASSISTANT PROFES-SOR level in Écology beginning September 1996. Teaching responsibilities include an introductory ecology course and an advanced field course in an area of the candidate's interest, involvement in the team-taught introductory biology course, and participation in a new interdepartmental program in Environmental Sciences. Opportunities are also available for participation in an existing interdepartmental program in Neural and Behavioral Sciences. Development of an active research program involving undergraduate and graduate students is expected. A doctorate and at least one year of postdoctoral research experience are required. Send curriculum vitae, statement of research and teaching interests, sample publications, and names and addresses of three references by November 15, 1995 to: Dr. Karen Greif, Chair, Department of Biology, Bryn Mawr College, 101 North Merion Avenue, Bryn Mawr, PA 19010-2899. Bryn Mawr College is an Equal Opportunity/Affirmative Action Employer. The College particularly wishes to encourage applications from individuals interested in joining a multicultural and interna-tional academic community. Minority candidates and women are especially encouraged to apply

### DEVELOPMENTAL BIOLOGIST Department of Biological Sciences Stanford University

We invite applications for a tenure-track position at the ASSISTANT PROFESSOR level from candidates investigating the mechanisms of development in higher eukaryotes. Please submit a curriculum vitae; FAX number; Email address; description of current and future research interests; and statement of teaching experience and interests to: Professor Virginia Walbot, Department of Biological Sciences, Stanford University, Stanford CA 94305-5020. The application deadline is 1 November 1995. Please provide the names, addresses, Email, FAX and telephone numbers of three referees. Applications from women and members of minority groups are strongly encouraged.

## **POSITIONS OPEN**

### ASSISTANT PROFESSOR BIOCHEMISTRY

The Department of Biology at The Johns Hopkins University invites applicants to fill a TENURE-TRACK FACULTY position within the broad area of biochemistry. This would include but is not limited to enzyme mechanisms, macromolecular structure with respect to function and recognition, and biochemical/biophysical approaches to understanding cell function or regulation. The successful candidate will be expected to establish a vigorous and well-recognized research program and to participate in both graduate and undergraduate teaching in biochemistry or physical biochemistry.

Applicants should send a curriculum vitae with a statement of current and future research interests, and arrange to have three letters of recommendation sent to:

Dr. Robert Maier Search Committee Chair Department of Biology—Mudd Hall The Johns Hopkins University Charles & 34th Streets Baltimore, MD 21218

Deadline for receipt of applications is November 1, 1995.

The Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are especially encouraged to apply.

Wildlife Ecology: ASSISTANT PROFESSOR in Wildlife Ecology, tenure-track, nine-month faculty position available January 1996 in the Department of Range, Wildlife, and Fisheries Management. Summer salary normally has been available through teaching and research funding. The position is 50% teaching and 50% research, with a teaching load of three courses per academic year. The applicant should have a Ph.D. in Wildlife Science or closely related area, with experience in upland game management and nongame bird ecology. The successful candidate will be expected to teach Introduction to Wildlife Management, Population Dynamics, and Upland Game Bird Ecology. A research program in upland game bird and nongame bird ecology will be developed. Applicants should send curriculum vitae, transcripts, description of research interests, and have three letters of recommendation forwarded by 15 October 1995 to: Dr. Loren M. Smith, Chairman of the Search Committee, Department of Range, Wildlife, and Fisheries Management, Texas Tech University, Lubbock, TX 79409-2125. Telephone: 806-742-2842; FAX: 806-742-2280; Email: C7LMS@TTACS1.TTU.EDU. Texas Tech is an Affirmative Action/Equal Opportunity Employer.

Tenure-track position at the ASSISTANT PROFES-SOR level, available July 1, 1996, as part of a Departmental growth program. Applicants should have a Ph.D. and/or M.D., relevant postdoctoral experience, a strong research background, and be using state-of-the-art methods to define molecular mechanisms which regulate cell function. Outstanding individuals who will expand and complement current Departmental teaching and research programs in the areas of cardiovascular pharmacology, receptor pharmacology, neuropharmacology, signal transduction, and regulation of cell growth will be considered. To ensure full consideration, applications must be received by October 27, 1995. Applicants should send a curriculum vitae, along with a summary of research interests and goals, and arrange to have at least three letters of reference sent to: Faculty Search Committee, Department of Pharmacology, University of Wisconsin Medical School, 1300 University Avenue, Madison, Wisconsin/Affirmative Action Employer.

The University of Oklahoma Health Sciences Center Toxicology Program announces a tenure-track faculty position at the ASSISTANT or ASSOCIATE PROFESSOR level available July 1, 1996. Applicant must hold a Ph.D. in toxicology, neurosciences or closely related field. An independent, extramurally funded research program and evidence of effective teaching are essential. Preference given to applicants working in neurotoxicology. Please submit curriculum vitae and a letter describing interests to: L. D. Fechter, Ph.D., Director of Toxicology, University of Oklahoma Health Sciences Center, College of Pharmacy, P.O. Box 26901, Oklahoma City, OK 73190. Three letters of recommendation should be sent independently. An Equal Employment Opportunity/Affirmative Action Employer.

## **POSITIONS OPEN**

ASSISTANT PROFESSOR STRUCTURAL BIOLOGY Department of Molecular Biology Princeton University

The Department of Molecular Biology at Princeton University invites applications for a tenure-track position in structural biology and biochemistry at the ASSIST-ANT PROFESSOR level. Exceptional senior level scientists may also be considered. Candidates must have a Ph.D. degree or equivalent and several years of postdoctoral experience.

Qualified applicants should send a curriculum vitae, a summary of research interests, and three letters of reference to:

Structural Biology Search Committee Department of Molecular Biology Princeton University Princeton, NJ 08544

Application deadline: December 1, 1995.

Princeton 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. 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. We strongly encourage applications from women and minority groups.

### BIOLOGY CHAIR University of Central Arkansas Search Reopened

The University of Central Arkansas invites applications and nominations for the position of Chair of the Department of Biology. The rapidly growing department has 20 faculty, over 400 undergraduate majors and 15 graduate (M.S.) students, a record of excellence in undergraduate education, and an expanding commitment to research. Organia projects span molecular to ecological topics

Ongoing projects span molecular to ecological topics. The University of Central Arkansas is a state-supported institution with an enrollment of 9,200 students. Conway, a prosperous community of 33,000, is located 30 miles north of Little Rock and within 40 miles of the Ozark and Ouachita National Forests. Conway has three colleges and an excellent public school system.

The successful candidate will have demonstrated achievements in undergraduate education, basic biological research, and administration. Letter of application and current resume, including statements of scholarly interests and philosophies of education and administration, should be sent with names, addresses, and phone numbers of three references to: Biology Chair Search Committee, College of Natural Sciences and Mathematics, Lewis Science Center 105, University of Central Arkansas, Conway, AR 72035. Review of materials will begin on 15 October 1995 and continue until the position is filled. UCA is an Equal Opportunity/Affinnative Action Employer.

### CHAIR Institute and Department of Physiology School of Life Science National Yang Ming University, Taiwan

Applications are invited for the CHAIR in the Institute and Department of Physiology. We seek an internationally recognized scholar in Physiology with an outstanding record of research accomplishment. Other qualifications include a Ph.D. in Physiology or a related field and an interest and talent for teaching. Curriculum vitae, references, and a summary of research interests should be sent to: Professor Y, H. W. Lee, Institute of Biochemistry, School of Life Science, Yang Ming University, Shihai, Taipei, Taiwan. The position is available immediately. Applications must be postmarked by 31 October 1995.

## Tenure-Track and Postdoctoral Opportunities.

The following research training opportunities are currently available at the National Institutes of Health.

## Tenure-Track Position Assistant Professor Equivalent

Molecular Genetics Joan C. Marini, MD, PhD

A position is available to develop an independent research program investigating heritable human disorders. Area of investigation should complement those of current staff and might include trinucleotide repeats, approaches to gene therapy, disorders of growth factors and their receptors. The candidate must have an active interest in clinical as well as basic research. Genetics Board certification preferred. Submit a two-page statement of research interests and goals in addition to three letters of recommendation by November 1, 1995. Heritable Disorders Branch (OE-96), NICHD, Building 10, Room 9S241, 10 CENTER DR MSC 1830, BE-THESDA MD 20892-1830, Fax 301-402-0234.

## Postdoctoral Positions

Molecular Endocrinology Sheue-yann Cheng, PhD

The effects of thyroid hormones on the growth and development of tumors are being studied with particular emphasis on the interaction of thyroid hormone receptors with tumor suppressors. A strong background in cell biology, biochemistry and molecular biology is preferred. Candidates should have less than five years of postdoctoral experience, and preferably be a US citizen or permanent resident. Laboratory of Molecular Biology (OE-96), NCI, Building 37, Room 2D24, 37 CONVENT DR MSC 4255, BE-THESDA MD 20892-4255.

## Molecular Study of Synapse Development Bai Lu, PhD

Molecular mechanisms underlying synaptogenesis are under investigation. Projects include cloning of molecules involved in synapse development and plasticity, and characterization of gene expression and signal transduction events associated with specific stages of synaptogenesis. Experience in basic biochemistry and molecular biology are required. Particularly desirable are techniques to handle small quantities of mRNAs and proteins (RT-PCR, HPLC). Laboratory of Developmental Neurobiology (OE-96), NICHD, Building 49, Room 5A38, 49 CONVENT DR MSC 4480, BETHESDA MD 20892-4480.

## Neurological Diseases Eugene O. Major, PhD

Neurologic diseases at the clinical, biological and molecular levels, emphasizing pathogenesis involving neurotropic viruses, toxic cytokines, or possible genetic alternations are being studied. Investigations of white matter diseases provide the principal focus which includes Progressive Multifocal Leukoencephalopathy (PML), caused by the human polyomavirus, JCV and AIDS associated encephalopathy involving HIV-1 damage to the brain. Experiments detail the molecular mechanism cell type recognition of viral sequences. Laboratory of Molecular Medicine and Neuroscience (OE-

96), NINDS, Building 36, Room 5W21, 36 CONVENT DR MSC 4164, BETHESDA MD 20892-4164.

## Nuclear Hormone Receptor Action Keiko Ozato, PhD

The mechanism of nuclear hormone receptor action is being studied. The current focus is to analyze the interaction between RXR and the basal transcription machinery and other nuclear regulatory proteins. To this end, *in vitro* transcription assays using recombinant receptors are employed. Genomic *in vivo* footprinting is performed for mammalian cells following gene transfer/disruption. Candidates should have less than five years of postdoctoral experience, and preferably be a US citizen or permanent resident. Laboratory of Molecular Growth Regulation (OE-96), NICHD, Building 6, Room 2A01, 6 CENTER DR MSC 6753, BETHESDA MD 20892-6753.

## Physiological Study of Synapse Development Bai Lu, PhD

A position is available to study molecules regulating synapse development and plasticity. Ongoing projects include: 1) role of neurotrophins in synapse development and function; 2) characterization of new molecules involved in specific stages of synaptogenesis. Close interaction between the electrophysiologists and molecular biologists exists in the laboratory. Experience in electrophysiology is required. A background in Ca<sup>2+</sup> imaging is highly desirable. Laboratory of Developmental Neurobiology (OE-96), NICHD, Building 49, Room 5A38, CONVENT DR MSC 4480, BETHESDA MD 20892-4480.

**Additional Opportunities** 

The NIHEDNET Bulletin Board **POSTDOC** (fellowship positions) and **TENURE** (tenure track positions) conferences are accessed via a modem (301-402-2221 or 800-358-2221 with parameters set at 7, Even, 1) or the Internet using Telnet (wylbur.cu.nih.gov) or the World Wide Web (URL: telnet:|| wylbur.cu.nih.gov). When connected to NIH, key in ,vt100 for terminal emulation, F5E for initials, and AJL1 for account number. To view tenure track positions, quit the **POSTDOC** conference and join the **TENURE** conference.

An electronic version of the Postdoctoral Research Fellowship Opportunities catalog is accessed via the Internet using either the Gopher Information System (gopher.nih.gov) or the World Wide Web (URL: http://www.nih.gov). When connected with Gopher, select Grants and Research Information and then NIH Office of Education. When connected with WWW, select Grants and Contracts and then NIH Office of Education. If you have further questions, please contact the NIH Office of Education, Building 10, Room 1C129, 10 CENTER DR MSC 1158, BETHESDA MD 20892-1158, Phone 301-496-2427, Fax 301-402-0483.

To Apply

If you hold a graduate doctoral degree (e.g., PhD, MD/PhD) or a professional degree (MD, DO, DDS, DMD or DVM) accompanied by previous laboratory research experience, and would like to be considered for one of these positions, please send a cover letter, *curriculum vitae*, bibliography, and statement of research interests to the address listed with each position. In addition, please arrange to have letters of recommendation sent from three scientists who can provide an evaluation of your qualifications.

## National Institutes Of Health

Office Of Education

## MOLECULAR "EXCITABLE CELL" PHYSIOLOGIST

A tenure-track ASSISTANT/ASSOCIATE PRO-FESSORSHIP is available for a molecular physiologist whose research interests in nerve and muscle cells complement those of the neurobiology and cardiopulmonary faculty in the Department. The successful candidate must have a Ph.D. or equivalent degree, two years of postdoctoral research experience, and is expected to establish an extramurally-funded research program as well as participate in teaching general physiology courses. Start-up funds are available. The deadline for applications is November 15, 1995 with a starting date between May I and September 1, 1996. An application letter, description of current and long-term research interests, description of teaching experience and interests, curriculum vitae, and the names, addresses and telephone numbers of four individuals who were asked to provide reference letters should be sent to: Dr. Douglas N. Ishii, Search Committee Chair, Department of Physiology, Colorado State University, Fort Collins, CO 80523. Colorado State University is an Equal Opportunity/Affirmative Action Employer. Women and ethnic minorities are strongly urged to apply.

ASSISTANT PROFESSORSHIPS, Tenure-track. Comparative Animal Physiologist to teach human physiology and anatomy, pathophysiology for nurses and specialty courses. Plant Physiological Ecologist to teach botany, plant physiology and general ecology. Available September 1, 1996 (pending outcome of state budget and funding). Ph.D. required. Write or call for detailed descriptions and instructions. Application deadline October 31, 1995. Contact: Department of Biology, California State University, 9001 Stockdale Highway, Bakersfield, CA 93311. Telephone: 805-664-3089; FAX: 805-664-2040; Email: epedroza@academic.csubak.edu. Affirmative Action/Equal Opportunity Employer.

CHAIRPERSON of Microbiology and Immunology: The School of Medicine of the University of North Dakota invites applications and nominations for the position of Chairperson of the Department of Microbiology and Immunology. We seek an outstanding medical scientist who will provide the leadership to ensure an excellent teaching program and productive research focus.

Those interested in the position should send a curriculum vitae to: Dr. David W. Hein, Chairman of the Department of Pharmacology and Toxicology and Chair of the Search Committee, c/o Office of the Dean, School of Medicine, University of North Dakota, Box 9037, Grand Forks, ND 58202-9037. Nominations and suggestions should also be sent to Dr. Hein. Review of applications will begin as soon as they are received. Applications should be received prior to December 15, 1995, but the search will remain open until the position is filled.

The University of North Dakota is an Equal Opportunity/Affirmative Action Institution.

CHAIR, Department of Chemistry, University of Missouri-Rolla (UMR). Applications and nominations are sought for the position of Chair of the Chemistry Department at the University of Missouri-Rolla. We are seeking candidates with an international research reputation, a commitment to excellence in undergraduate teaching, graduate teaching, research, and the promise of progressive leadership. The Department has 19 tenure-track faculty (including two Curator's Professors), 74 graduate students, and 80 undergraduate majors. Preferred starting date is September 1, 1996. Applicant should submit a curriculum vitae and the names of four references (with telephone numbers) to: Department Chair Search Committee, Department of Chemistry, University of Missouri-Rolla, 142 Schrenk Hall, Rolla, MO 65401-0249. Review of applications will begin November 1, 1995 and continue until the position is filled. UMR is an Affirmative Action/Equal Opportunity Employer.

The Department of Psychology at Johns Hopkins University solicits applications in Biopsychology and Developmental Psychology. Applications will be considered for TENURED or TENURE-TRACK appointment at any rank beginning July 1, 1996.

Send a curriculum vitae (including a statement of research and teaching interests), three letters of reference, and reprints to: Biopsychology or Developmental Search Committee, Department of Psychology, Johns Hopkins University, Baltimore, MD 21218. Interviews will begin November 1, 1995.

Johns Hopkins University is an Equal Opportunity Employer.

## **POSITIONS OPEN**

BAYLOR COLLEGE OF MEDICINE DEPARTMENT OF CELL BIOLOGY Two Tenure-track Positions in Molecular Biology of Reproduction and Hormone Action

The Department of Cell Biology announces the availability of two tenure-track positions at either the SE-NIOR or JUNIOR-FACULTY LEVEL. We seek individuals holding the Ph.D. or M.D. degree with a strong interest in research and graduate Ph.D. training. One position is targeted at Reproductive Biology, with a research emphasis on the molecular biology of cellular processes controlling these pathways including (but not limited to) areas such as sex determination and reversal, embryonic differentiation and cellular commitment, cell migration and organogenesis, particularly as these processes impact upon sexual dimorphism. A second position targets steroid hormone action, with a research emphasis on receptors, including (but not limited to) their biology and biochemistry, and their role in gene transcription and cellular control processes. The Department offers a robust and well-established research environment in many areas of modern biology, with excellent animal and instrumentation capabilities, including a Center for Reproductive Biology Research. Applicants should send a curriculum vitae, a summary of their proposed research activities, and the names of three scientists who can evaluate their accomplishments and future potential as independent scientists and teachers at the graduate level. Successful senior applicants will have already established a successful record of productivity and leadership in publications and funding. Applications should be sent by November 1, 1995 to:

Chairperson, Reproductive Biology Faculty Search Committee Department of Cell Biology, Room M-603 Baylor College of Medicine Houston, TX 77030

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

### WEST VIRGINIA SCHOOL OF OSTEOPATHIC MEDICINE PHARMACOLOGY FACULTY POSITION AVAILABLE

The Department of Pharmacology invites applications for a TENURE-TRACK POSITION; appointment to be made at a level commensurate with experience. Position requires a Ph.D. in pharmacology and prior teaching experience. The successful applicant must be broadly trained and able to present a variety of topics in the basic pharmacology course offered to medical students. Research opportunities are available. Applicants should submit a letter describing their teaching experience, research interests, curriculum vitae, names and addresses of three references to: Chairperson, Pharmacology Search Committee, Human Resources Office, WVSOM, 400 North Lee Street, Lewisburg, WV 24901. Applications will be accepted until the position is filled. An Equal Employment Opportunity/Affiniative Action Employer.

Announcement FACULTY POSITION OPEN-INGS. Assistant Professor and Assistant/Associate Professor. Cellular and Molecular Physiology. The Department of Physiology, University of Wisconsin-Madison, invites applications for tenure-track positions at the rank of Assistant Professor or Associate Professor. The Department is developing a focus in membrane transport physiology. We specifically seek applicants who study carriermediated transport or vesicular transport across cell membranes, although outstanding applicants in other areas of molecular physiology will be considered. Opportunities for participation in campus-wide interdisciplinary research and training programs are excellent. Successful candidates will teach renal, gastrointestinal or respiratory physiology and will participate fully in the graduate and professional teaching programs of the department.

Applicants should send curriculum vitae, a one or two page summary of research interests and plans, and three letters of reference to: Dr. Richard L. Moss, Chair, Department of Physiology, University of Wisconsin, 1300 University Avenue, Madison, WI 53706. Applications will be accepted until October 19, 1995. The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer. Women and minorities are especially encouraged to apply.

## **POSITIONS OPEN**

FACULTY POSITION
Biochemistry/Molecular Biology/Cancer Research

The Department of Biochemistry and Molecular Biology and the Stanley S. Scott Cancer Center are seeking a candidate at any academic level for a TENURE-TRACK POSITION. Áreas of interest include the molecular biology of cancer cells, including gene expression and regulation, signal transduction, oncogenes, tumor suppressor genes, angiogenesis, metastasis, apoptosis, and other related areas. A clear focus on the study of cancer is required, and a desire to develop research programs that can be translated from the lab bench to the clinic would be advantageous. The Stanley S. Scott Cancer Center, which has recently been awarded an NCI Planning Grant, provides an outstanding growth opportunity for scientists interested in cancer research. The successful candidate will be expected to develop an active, extramurally-funded research program and to teach in the Department of Biochemistry and Molecular Biology. Space, start-up funds, salary, and fringe benefits present an extremely attractive package. Applicants should send a curriculum vitae, a brief description of future research plans, and the names of three references to: Wayne V. Vedeckis, Ph.D., Search Committee Chairperson, Department of Biochemistry and Molecular Biology, Louisiana State University Medical Center, 1901 Perdido Street, New Orleans, LA 70112. LSU Medical Center is an Affirmative Action/Equal Opportunity Employer.

### GENETICIST

Rank open; TENURE-TRACK or with tenure, depending on rank, beginning July 1, 1996. Preference given to candidates studying genetic processes using molecular approaches. The candidate is expected to establish an active research program, supervise senior undergraduate research projects, and teach approximately one and one-half courses per semester, including a co-taught introductory biology course (Molecules, Genes, and Cells) and an upper-level course in genetics. Ph.D. required and post-doctoral experience expected.

Send curriculum vitae, statement of research and teaching interests, and three letters of evaluation by December 1, 1995 to: Patrick Williamson, Chair, Department of Biology, Amherst College, Amherst, MA 01002-5000.

Amherst College, a private coeducational liberal arts college of some 1570 students and 165 faculty located in the Connecticut River Valley of Western Massachusetts, participates with Hampshire, Mount Holyoke, and Smith Colleges and the University of Massachusetts in the Five-College Consortium. Amherst College is an Affirmative Action/Equal Opportunity Employer, and encourages women, minorities, and disabled persons to apply.

### GENETICIST Carleton College

Applications are invited for a one term (1/3 academic year, January 1 to March 15, 1996) appointment in the Department of Biology. Teaching responsibilities include a mid-level lecture/laboratory course in genetics. Ph.D. preferred-ABD considered. Send application, curriculum vitae, undergraduate and graduate transcripts, a statement of teaching philosophy, a summary of research, and three letters of reference to: Susan Singer, Department of Biology, Carleton College, Northfield, MN 55057-4025. Review of applications begins October 6, 1995. Carleton College is an Equal Opportunity/Affinnative Action Employer. Women and minority candidates are strongly encouraged to apply.

## TEACHING POSITIONS Physiology, Anatomy, Microbiology and Pathology

Available at American University of the Caribbean School of Medicine. The Physiology, Anatomy and Microbiology positions are located at St. Maarten in the Caribbean. The Pathology position is located at Belize, Central America. Applicants must have a Ph.D. or M.D. degree and be devoted to teaching medical students. American curriculum taught in English. Send resume to MEIO-S, 901 Ponce de Leon Boulevard, No. 201, Coral Gables, FL 33134. Telephone: 305-446-0600.

## The excitement of discovery backed by \$620 million annually in R&D ...

## That's Schering-Plough

The fulfillment of seeing your ideas happen. At Schering-Plough, we invest over \$620 million annually to advance the process of discovery and development. To the dedicated scientist, this means a greater opportunity to see your work extend and enhance lives the world over.

## CNS RESEARCH

We have excellent opportunities for talented scientists at all levels who are interested in joining an expanding multidisciplinary group focusing on molecular targets for CNS disorders. Experience working with receptors, transporters, G proteins or other signal transduction systems is highly desirable. Background in molecular biology, molecular pharmacology or biochemistry is required; experience with obesity, Alzheimer's disease or schizophrenia is desirable.

## RESEARCH FELLOW

Requires a PhD and 8-12 years of postdoctoral experience, along with clear evidence of scientific leadership and management skills. Strong interpersonal skills and scientific reputation a must. The successful candidate will conceive, propose and design innovative research projects as well as provide in-depth scientific knowledge and advice to Research staff and management in area of scientific specialty.

## SENIOR/PRINCIPAL SCIENTIST

Requires a PhD and 2-7 years of postdoctoral experience demonstrating strong research background plus ability to initiate and direct an independent research program in the CNS area.

## ASSOCIATE SCIENTIST

Requires a BS/MS with laboratory experience plus strong technical and interpersonal skills in a research setting. As a member of our CNS research team, the successful candidate will be responsible for performing experiments in a variety of CNS areas.

## POSTDOCTORAL FELLOW

Requires a PhD and strong research background to work on signal transduction research in the CNS area. Excellent communication and interpersonal skills a must.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to forward a resume indicating your position of interest and salary requirements to: Human Resources-KB, Dept. CS, K-15-1, MS#1255, Schering-Plough Research Institute, 2015 Galloping Hill Road, Kenilworth, NJ 07033-0539. We are an equal opportunity employer. We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.



## INVERTEBRATE ECOLOGIST

The Department of Biology at The University of New Mexico (UNM) is seeking applicants who do research in any area of Invertebrate Ecology for a full-time, tenurerack position as ASSISTANT PROFESSOR, to begin August 19, 1996. Minimum requirement: Ph.D. in related field. Preferred characteristics: Post-doctoral experience; an innovative and conceptually-based research program as reflected in publications and other scholarly activities; and a commitment to excellent teaching at the beginning undergraduate through graduate levels. The successful applicant will be expected to establish an extramurally-funded research program, and to participate in departmental service activities. Send a letter of application, curriculum vitae, representative reprints, statements of research and teaching interests, and at least three letters of reference to:

Chair, Invertebrate Ecologist Search Committee Department of Biology The University of New Mexico Albuquerque, NM 87131-1901 Telephone: 505-277-3411; FAX: 505-277-0304

Complete applications must be received by October 16, 1995.

UNM is an Equal Opportunity/Affirmative Action Employer and Educator.

### RESEARCH ASSISTANT PROFESSOR

The Division of Renal Discases and Hypertension, Department of Medicine, University of Colorado School of Medicine, is seeking a faculty member at the ASSISTANT PROFESSOR level. The position is 100% research and requires a doctorate degree, at least three years of postdoctoral training in Biochemistry or Cell/Molecular Biology, and a credible publication record. The successful candidate will be expected to continue and foster rigorous, externally funded research in the area of proximal tubule injury and supervise postdoctoral fellows. Knowledge of the mechanisms of cell injury and regulation of intracellular calcium, nitric oxide synthase and proteases with respect to renal epithelial and vascular systems would be particularly attractive. Please send curriculum vitae, statement of research interests, letters of reference and significant recent publications to:

Robert W. Schrier, M.D., Chairman of Medicine,

Robert W. Schrier, M.D., Chairman of Medicine, University of Colorado Health Sciences Center, Box C281, 4200 East 9th Avenue, Denver, CO 80262. The University of Colorado is committed to Equal Employment Opporunity and Affirmative Action.

## PLANT PHYSIOLOGICAL ECOLOGIST

The Department of Biological Sciences at Texas Tech University invites applications for a tenure-track position at the ASSISTANT PROFESSOR level, to begin in August 1996. Applicants should have a Ph.D. in Botany, Ecology or related field. Postdoctoral experience is preferred. The successful candidate will be expected to collaborate with existing faculty and to develop an extramurally-funded research program utilizing physiological methods to investigate ecological topics. Departmental research strengths include plant response to environmental stress, plant-microbe and plant-animal interactions, plant evolutionary genetics, community ecology, and ecosystem dynamics. Other responsibilities include directing graduate students, sharing introductory classes in botany, plant physiology or ecology, as well as developing an advanced course in plant physiological ecology. Applicants must send a curriculum vitae and statement of research and teaching interests, and have three letters of recommendation sent by October 25, 1995, to: Search Committee, Department of Biological Sciences, Texas Tech University, Lubbock, TX 79409-3131. Texas Tech University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply,

## CELL BIOLOGY

FACULTY POSITION. The Department of Cell Biology and Anatomy invites applications from individuals with strong research programs in molecular aspects of cellular or developmental biology. Faculty rank will be determined by experience. Teaching will be in medical or graduate cell biology, developmental biology or histology. Submit applications with curriculum vitae, summary of research interests, and names of references to: Cell Biology Search, Department of Cell Biology and Anatomy, Johns Hopkins Medical School, 725 North Wolfe Street, Baltimore, MD 21205. Johns Hopkins is an Equal Opportunity/Affirmative Action Employer and welcomes applications from women and minority group members.

### **POSITIONS OPEN**

### HEAD, DEPARTMENT OF CHEMISTRY University of Tennessee, Knoxville

Applications are invited for persons qualified for appointment as **FULL PROFESSOR** to serve as Head of the Department of Chemistry at the University of Tennessee, Knoxville, a Carnegie I Research Institution. Candidates must have a Ph.D. or equivalent degree in chemistry or a related field, excellent interpersonal and communication skills, and a nationally or internationally recognized record of scholarly research. The successful candidate is expected to provide strong leadership in enhancing the stature of the research and instructional programs of this nationally recognized Department, and in representing the Department to outside constituencies. The Head is also expected to maintain a competitive, externally-funded research program. The Department currently consists of 31 full-time faculty, 25 staff, approximately 35 postdoctoral associates, and 115 graduate stu-dents. The faculty has a strong commitment to quality graduate and undergraduate education, and maintains close research relationships with Oak Ridge National Laboratory. Applicants should submit a letter of interest describing how their qualifications meet the position requirements, a curriculum vitae, and names of five references, to: **De**partment Head Search Committee, Department of Chemistry, University of Tennessee, Knoxville, TN 37996-1600. Consideration of completed applications will begin on November 15, 1995, and will continue until the position is filled. University of Tennessee, Knoxville is an Equal Employment Opportunity/Affirmative Action/Title IX/Section 504/ADA Employer.

## BIOCHEMISTRY FACULTY POSITION University of Wisconsin-Madison

The Department of Biochemistry at the University of Wisconsin-Madison invites applications for a TENURE-TRACK POSITION from individuals whose research interests are in one of the following three areas: 1) molecular structure determination using NMR spectroscopy, crystallography, or other physical methods; 2) eukaryotic biology; and 3) plant molecular biology/biochemistry. The appointment will be at the assistant professor level, but in the case of the structural biochemistry position it can be at the associate level.

The successful candidate is expected to develop a vigorous, independent research program and participate in teaching undergraduate and graduate courses in general and specialized biochemistry. Depending on the candidate's research interests, the position could be joint with the Enzyme Institute, with the tenure home in Biochemistry. Salary will be on a 12-month basis and will be commensurate with the candidate's experience. Applications, including curriculum vitae, list of publications, summary of past work and accomplishments, and a statement of plans for future research, should be sent to: Professor Hector F. DeLuca, Chairman, Department of Biochemistry, University of Wisconsin-Madison, 420 Henry Mall, Madison, WI 53706, USA. In addition, applicants should arrange for at least three letters of reference to be mailed to the same address. Application materials should be received by October 20, 1995. The University of Wisconsin-Madison is an Affirmative Action/Equal Opportunity Employer, Minority and women candidates and all other qualified persons are encouraged to apply. Under Wisconsin Statutes, names, titles, and addresses of applicants and nominees may be subject to public release upon request.

## ST. CLAIR DRAKE INITIATIVE ROOSEVELT UNIVERSITY

Intended to diversify the College of Arts and Sciences faculty, this initiative celebrates the 50th anniversary of a university deeply committed to social justice and metropolitan community. St. Clair Drake, author of Black Metropolis, developed his international reputation at Roosevelt. We seek to reaffirm our mission with a faculty which reflects our heterogeneous student body. Roosevelt University is an independent metropolitan institution with 6,700 students at downtown and suburban campuses. Subject to funding, we expect to make one or two tenure-track appointments at the ASSISTANT PROFESSOR level for fall 1996 from among the following disciplines: Biology, Biochemistry, Chemistry, Environmental Science, Geochemistry.

We especially welcome applications from African-American, Latino/a and Native American candidates. Send letter, curriculum vitae, graduate transcript and three references by November 3, 1995 to: Dr. L. Weiner, Associate Dean, College of Arts and Sciences, Roosevelt University, 430 South Michigan Avenue, Chicago, IL 60605.

### **POSITIONS OPEN**

### FACULTY POSITIONS PHYSIOLOGY AND BIOPHYSICS University of Arkansas for Medical Sciences

The Department of Physiology and Biophysics has two tenure-track faculty positions available at the rank of ASSISTANT, ASSOCIATE, OR FULL PROFESSOR. Candidates in all areas of physiology and biophysics will be considered, but applications are especially encouraged from individuals who study structure, function, or regulation of membrane proteins at the cellular or molecular level. Successful candidates will be expected to develop independent research programs and participate in the teaching of medical students and graduate students. Generous startup funds and new laboratory space will be provided.

Applicants should submit curriculum vitae, statement of research interests, and the names and addresses of three individuals who may be contacted for letters of reference to:

Michael L. Jennings, Ph.D., Chairman Department of Physiology and Biophysics University of Arkansas for Medical Sciences 4301 West Markham Street, Mail Slot 505 Little Rock, AR 72205

The University of Arkansas is an Equal Opportunity Employer and welcomes applications from women and minority group members.

FACULTY POSITION in molecular neurobiology: The Ohio State University is undertaking a major initiative in Molecular Life Sciences Research that will include at least thirty new faculty positions in the next six years and has made a major commitment to develop an outstanding interdisciplinary program in neuroscience. Applications are invited for a tenure track faculty position at the ASSIST-ANT PROFESSOR level. The successful candidate will have a position in either the College of Pharmacy, Division of Pharmacology, or the Department of Physiology in the College of Medicine with a joint appointment in the Neurobiotechnology Center. A transgenic mouse facility and other excellent support facilities are available. The new faculty member will be expected to develop an independent research program that employs molecular biological approaches to address problems in neurobiology, and contribute to the teaching mission of the home department. Applicants should submit a curriculum vitae, statement of research plans, and arrange to have three letters of reference sent to: Dr. James S. King, Chairperson, Molecular Neurobiology Search Committee, 4072 Graves Hall, 333 West Tenth Avenue, Columbus, OH 43210-1239. Deadline: December 1, 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.

### WORCESTER POLYTECHNIC INSTITUTE BIOCHEMISTRY—FALL, 1996

The Department of Chemistry solicits applications for a tenure-track appointment in biochemistry at the ASSIST-ANT PROFESSOR level. Applications are invited from candidates in all areas of biochemistry. Applicants should have a Ph.D. degree and will be expected to develop strong research and teaching programs at the undergraduate and graduate levels. To apply, submit complete résumé, including research plans and teaching interests, and three letters of recommendation by November 1, 1995 to: Dr. James P. Dittami, Department of Chemistry, Worcester Polytechnic Institute, 100 Institute Road, Worcester, MA 01609.

Worcester Polytechnic Institute (WPI) offers a smoke-free environment. To curich education through diversity, WPI is an Equal Opportunity/Affirmative Action Employer.

### ASSISTANT PROFESSOR Division of Molecular Pharmacology

This 12-month, tenure-track position is immediately available. The ideal candidate will have equally strong interests in teaching Pharmacy students and in maintaining an active research program involving M.S. and Ph.D. students. Teaching responsibilities include a divisional undergraduate course and a graduate course in the applicant's area of expertise. A background in Pharmacy education is desired, but not required. Applicants should possess a Ph.D., postdoctoral experience and a working knowledge of molecular techiques.

Send a cover letter, curriculum vitae and the names of three references to: David S. Roane, Ph.D., Molecular Pharmacology, School of Pharmacy, Northeast Louisiana University, Monroe, LA, 71209-0470. An Equal Opportunity/Affirmative Action Employer.



## DHHS/PHS/Food and Drug Administration Center for Biologics Evaluation and Research Rockville, MD

## **DIRECTOR: DIVISION OF CLINICAL TRIAL DESIGN AND ANALYSIS**

The Office of Therapeutics Research and Review is recruiting for a physician to serve as the Director for the Division of Clinical Trial Design and Analysis. The Director is responsible for managing a multidisciplinary medical, scientific and administrative staff of approximately 45 people engaged in the following: Evaluation of the safety and efficacy of biological therapeutic products based upon data from clinical and pre-clinical trials, evaluation of the design adequacy of proposed trials, and development of policy and of a research program related to clinical trial design and analysis.

**QUALIFICATIONS:** Applicants must have a Doctor of Medicine or Doctor of Osteopathy degree from an accredited institution. Graduates of foreign medical schools must submit a copy of their permanent Education Commission for Foreign Medical Graduates (ECFMG) certification. Applicants should possess the ability to evaluate the design and the results of clinical trials and pre-clinical studies of biologics; demonstrate leadership and managerial ability in directing complex medical/scientific programs; and possess ability to deal effectively with high-level government and pharmaceutical industry officials, representatives of the scientific and academic communities, and national and international health organizations.

**SALARY RANGE**: Salary range for civil service positions at the GS-15 level is \$72,471 to \$93,166 per annum if determined by peer review board. Physicians may also be eligible for EITHER a Physicians Comparability Allowance of \$4,000 to \$20,000 per annum, OR Physician Special Pay up to \$148,400 based on experience, qualifications, and medical speciality.

**HOW TO APPLY**: For additional information about the position and instructions on how to apply, call Ms. Lucero at (301)443-6142. Applications must be received or postmarked by October 27, 1995.

## DEPUTY DIRECTOR DIVISION OF BACTERIAL PRODUCTS (DBP)

The Office of Vaccines Research and Review is recruiting a physician or scientist to serve as Deputy Director of the Division of Bacterial Products. The Deputy Director will assist the Division Director in supervising the activities of the Division, which are to conduct scientific research related to the microbiology, pathogenesis, and immunology of bacterial diseases, and to review INDs and Product License Applications for bacterial vaccines and related products.

**QUALIFICATIONS:** *Physicians* - Applicants must have a Doctor of Medicine or Doctor of Osteopathy degree from an accredited institution and additional clinical and/or research training. Graduates of foreign medical schools must submit a copy of their permanent Education Commission for Foreign Medical Graduates (ECFMG) certificates.

**Scientists**- Applicants must have an advanced degree in microbiology, immunology or related field and additional research training.

Applicants must be able to evaluate the safety, efficacy and public-health significance of bacterial vaccines and related products, demonstrate leadership and managerial ability, and deal effectively with government and pharmaceutical officials, representatives of the scientific and academic communities, and national and international health organizations. Relevant laboratory research by the Deputy Director is encouraged.

## CHIEF LABORATORY OF BACTERIAL TOXINS (DBP)

The Office of Vaccines Research and Review, Division of Bacterial Products is recruiting a physician or scientist to serve as Chief of the Laboratory of Bacterial Toxins. The Laboratory Chief will oversee the activity of the Laboratory in conducting research related to toxin-producing bacteria and their diseases and reviewing IND and Product License Applications for bacterial vaccines and related products.

**QUALIFICATIONS:** *Physicians* - Applicants must have a Doctor of Medicine or Doctor of Osteopathy degree from an accredited institution and additional clinical and/or research training. Graduates of foreign medical schools must submit a copy of their permanent Education Commission for Foreign Medical Graduates (ECFMG) certificates.

**Scientists**- Applicants must have an advanced degree in microbiology, immunology or related field and additional research training.

Applicants must be able to evaluate the safety, efficacy and public-health significance of bacterial vaccines and related products, demonstrate leadership and managerial ability, and deal effectively with government and industry officials and representatives of the scientific and academic communities

**SALARY RANGE**: *For physicians*: Salary range for Civil Service positions at the GS-14/GS-15 level is \$67,385 to \$93,166 per annum if determined by peer review board. Physicians may also be eligible for EITHER a Physicians Comparability Allowance of \$4,000 to \$20,000 per annum, OR Physicians Special Pay up to \$148,400 based on experience, qualifications, and medical speciality.

For scientists (other than M.D.): Civil Service salary range for GS-14/GS-15 is \$60,925 to \$93,166 per annum.

Salary, benefits, research support, and level of responsibility are commensurate with education and experience.

**HOW TO APPLY**: Call **301-496-1014** and request vacancy announcements. Applications must be received or postmarked by October 27, 1995.

These three permanent positions are available immediately and can be filled as either a Civil Service or U.S. Public Health Service Commissioned Corps position. U.S. Citizenship is required.

FDA is an equal opportunity employer and has a smoke free environment.

### ASSISTANT/ASSOCIATE PROFESSOR FOREST SOILS

The Department of Forest Sciences at University of Alaska Fairbanks invites applications for a 12-month TENURE-TRACK POSITION. A Ph.D. is required in Forest Soils, Forestry, Natural Resources Management, Landscape Ecology, Soil Ecology or a related field. Candidates should have a demonstrated ability to investigate problems related to forest site productivity, sustainable resource development, global change or basic state factor principles related to landscape-level questions of forest soil quality and forest development. Send résumé, all university transcripts, a statement of your research interests, a description of your ability to meet the responsibilities of the position, and three letters of support to: Michele Pogue, SALRM/ACE Personnel Contact, P.O. Box 756180, University of Alaska Fairbanks, AK 99775. Application closing is October 7, 1995. The University of Alaska Fairbanks is an Affirmative Action/Equal Opportunity Employer and Education Institution.

## EVOLUTIONARY MORPHOLOGIST The Johns Hopkins University School of Medicine

The Department of Cell Biology and Anatomy, Johns Hopkins University School of Medicine, invites applications for a JUNIOR or SENIOR LEVEL FACULTY position in functional anatomy and evolution, with primary teaching responsibility in human gross anatomy. Applicants must have a Ph.D., teaching experience in gross anatomy, and an established research program in some aspect of vertebrate anatomy or evolution, such as physical anthropology, vertebrate paleobiology, experimental morphology, genetics, or phylogenetic systematics (morphologic or molecular). Deadline for receipt of applications December 1, 1995. Send curriculum vitae, one-page statement of research goals/interests, and names and addresses of three references to: Anatomy Search Committee, Department of Cell Biology and Anatomy, Johns Hopkins University School of Medicine, 725 North Wolfe Street, Baltimore, MD 21205. The Johns Hopkins University is an Equal Opportunity/ Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study mechanisms of neuronal differentiation, including the function of growth factors and receptors. Molecular biology and neurobiology experience desired. Please send curriculum vitae, brief statement of research interests, and three references to: Dr. Renping Zhou, Laboratory for Cancer Research, College of Pharmacy, P.O. Box 789, Rutgers University, Piscataway, NJ 08855-0789. FAX: 908-445-0687. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study the molecular mechanisms of magnesium permeability and intracellular magnesium homeostasis in eukaryotic cells. Applicants should have a strong background in molecular biology. Please send curriculum vitae and the names and telephone numbers of three references to: Dr. Robin R. Preston, Department of Physiology, The Medical College of Pennsylvania and Hahnemann University, 2900 Queen Lane, Philadelphia, PA 19129. FAX: 215-843-6516. Email: preston@medcolpa.edu

The Medical College of Pennsylvania and Halmemann University is an Equal Opportunity/Affirmative Action Employer.

BIOMETRICIAN II (Theoretical Population Geneticist). The Genetics Laboratory of the Alaska Department of Fish and Game (ADF&G) is seeking applicants for Genetics Biometrician. The incumbent will serve as the consulting statistician for one of the oldest and largest fish genetics labs in North America with excellent laboratory and computing facilities. Relocation allowance and \$45,000 per year. Interested applicants should send a curriculum vitae, research interests, and names of three references to: Dr. Lisa Seeb, Alaska Department of Fish and Game, 333 Raspberry Road, Anchorage, AK 99518. Telephone: 907-267-2249; Email: inquiries to LSeeb%fishgame@STATE.AK.US. The State of Alaska is an Equal Opportunity/Affirmative Action Employer.

### **POSITIONS OPEN**

## POSTDOCTORAL POSITION

Requires Ph.D. or M.D. Will pursue basic and clinical studies of human gene therapy. Vectors derived from retroviruses and adenoviruses will be used in these studies. A strong background in molecular/cellular biology is desirable. Send curriculum vitae, a description of research experience, and the names, addresses and telephone numbers of three references to: City of Hope, Human Resources, Attn: JY, 1500 East Duarte Road, Duarte, CA 91010-3000. FAX: 818-301-8448. Email: jyasmineh@smtplink.coh.org. Affirmative Action/Equal Opportunity Employer.

## ONE INSTRUCTOR/RESEARCH ASSOCIATE TWO POSTDOCTORAL POSITIONS

INSTRUCTOR/RESEARCH ASSOCIATE will teach graduate courses on gene regulation and will conduct research on hepatic gene regulation with emphasis on apolipoprotein regulation. Requires Ph.D. in biomedical sciences, molecular and cell biology and demonstrated ability in DNA-protein interactions, functional analysis of transcription factors, antisense methodologies, and/or transgenic methodologies. Salary: \$27,000 to 30,000, depending on qualifications. Postdoctorals will work on a) functional analysis and assembly of apolipoprotein B, or b) the structure function analysis of apolipoprotein E and its interactions with intracellular, or secreted proteins. Experience in molecular biology, protein and cell culture techniques, or prior training in transgenic methodologies. Salary: NIH scale. References: *I. Biol. Chem.* **267**:16553: Biochemistry 32:9080; PNAS 92:659. Send curriculum vitae to: Dr. V. Zannis, Molecular Genetics, W509, BUMC, Boston, MA 02118.

POSTDOCTORAL POSITION available immediately to study ion channels in human and rat megakaryocytes. Previous experience with patch clamp electrophysiological techniques is highly desirable. Send curriculum vitae, a statement of research experience and the names, addresses and telephone numbers of three references to Dr. Alan Fein, Department of Physiology, University of Connecticut Health Center, Farmington, CT 06030-3505. FAX: 203-679-1269; Email: afein@neuron.uchc.edu. An Affirmative Action/Equal Opportunity Employer. Minority/Female/Persons with Disablities/Veteran.

The DuPont Company is seeking qualified applicants for a **RESEARCH POSITION** in molecular toxicology. Principal responsibilities include: 1) developing and operating a core molecular toxicology laboratory in support of an array of toxicology research projects; and 2) designing and conducting original research investigations within a program project on the adverse effects of chemicals on endocrine function. A strong background in molecular biology and working knowledge of all basic molecular biology protocols is essential. Additional experience with advanced molecular technologies and a proven ability to effectively communicate and teach molecular biology concepts and procedures to others is a strong asset. A Ph.D. in toxicology, biology, or a related field and at least two years of postdoctoral training or relevant work experience is required. Please send a cover letter and curriculum vitae to: Mary Jane Hudson, E.I. duPont de-Nemours and Company, Central Research and Development, Haskell Laboratory for Toxicology and Industrial Medicine, P.O. Box 50, Elkton Road, Newark, DE 19714. DuPont is an Equal Opportunity Employer.

### POSTDOCTORAL FELLOWSHIP WASHINGTON UNIVERSITY SCHOOL OF MEDICINE

A position is available to study the cellular and biochemical basis of prion diseases, which are unusual neurodegenerative disorders of humans and animals, including Creutzfeld-Jakob disease, kuru, and scrapie. The focus of the laboratory is how cells posttranslationally process and localize normal, mutant, and infectious forms of the prion protein. These studies are relevant to understanding other neurodegenerative disorders, including Alzheimer's disease. Qualifications include a Ph.D. or M.D. degree, an interest in neurobiology, and familiarity with cellular and molecular techniques. Please send a curriculum vitae, statement of research interests, and the names and addresses of references to:

David A. Harris, M.D., Ph.D.
Department of Cell Biology and Physiology
Washington University School of Medicine
660 South Euclid Avenue
St. Louis, MO 63110

An Equal Opportunity Employer.

## **POSITIONS OPEN**

### POSTDOCTORAL FELLOWSHIPS The Hebrew University of Jerusalem Jerusalem, Israel

The Hebrew University of Jerusalem invites applicants for the Golda Meir (and other) **POSTDOCTORAL FELLOWSHIPS** in Humanities, Social Sciences, Natural and Applied Sciences, Agriculture and Medicine for the 1995-96 academic year.

Candidates may apply at an early stage of their professional career (not later than three years after completion of their doctoral dissertation).

The fellowships are tenable for one academic year and

The fellowships are tenable for one academic year and may be extended for another year. The fellowship provides a 12 month stipend (with COL adjustments), rent allowance and a return ticket to Israel.

Application forms can be obtained from: The Office of University Funds, P.O. Box 1255, Jerusalem 91904 and must be returned by November 30, 1995.

Applicants may apply either for a University Fellowship (as above) or a Lady Davis Fellowship, but need not apply to both.

POSTDOCTORAL RESEARCH ASSOCIATE positions, funded by NIH, are available September 1, 1995, to study the acute and chronic aspects of the negative effect of alcohol on antihypertensive therapy. Studies will involve hemodynamic and electrophysiologic measurements in chronically instrumented conscious rats as well as central administration of drugs to investigate the role of central sympathetic pathways in the interaction. Candidates must have a Ph.D., M.D., D.V.M. or equivalent degree. Familiarity with neurobiology and autoradiolography are desirable. Send curriculum vitae, description of research experience, and names of three references to: Dr. Abdel A. Abdel-Rahman, Department of Pharmacology, East Carolina University School of Medicine, Greenville, NC 27858. Federal law requires proper documentation of identity and employability at the time of employment. Affirmative Action/Equal Employment Opportunity.

### POSTDOCTORAL POSITIONS ARKANSAS CANCER RESEARCH CENTER

POSTDOCTORAL POSITIONS are available as part of a multidisciplinary program in B cell neoplasia at the University of Arkansas for Medical Sciences. Specific areas include identification of genes associated with cell-mediated cytolysis for gene and immunotherapy, and regulation of tumor growth and apoptosis by cytokines and oncogenes. Ph.D.s and/or M.D.s with experience in molecular biology, cell biology and/or immunology are encouraged to apply. Send curriculum vitae and names of three references to: Dr. Jacki Kornbluth, Division of Hematology/Oncology, University of Arkansas for Medical Sciences, 4301 West Markham–Slot 508, Little Rock, AR 72205. FAX: 501-686-8165; Email: jkornbluth@acrc.uams.edu. Affirmative Action/Equal Opportunity Employer.

A POSTDOCTORAL POSITION is immediately available in a multidisciplinary vascular biology group to study molecular mechanisms of endothelial dysfunction by atherogenic lipoproteins. Applicants should have a Ph.D. and/or M.D. degree with a strong background in endothelial biology, molecular biology, lipid metabolism, signal transduction and immunology. Experience in endothelial gene regulation, especially promoter activation is highly desirable. The salary is \$25,000 to \$30,000 commensurate with experience. Send curriculum vitae to: Michael B. Stemerman, M.D., Room 413B, Basic Science Building, New York Medical College, Valhalla, NY 10595. Telephone: 914-993-4146; FAX: 914-993-4679.

POSTDOCTORAL POSITIONS, Neurobiology. Two positions available immediately 1) to study the binding pocket of the GnRH receptor (see *JBC*, 270:18853, 1995); 2) to study the molecular mechanisms underlying GnRH receptor activation (see *JBC*, 270:16683, 1995). Unique environment encompassing molecular biology, pharmacology and computational receptor modeling. Facility with molecular biology techniques required. Familiarity with molecular pharmacology, generating stable cell lines, and/or theoretical and experimental biophysics preferred. Send curriculum vitae and letters of three references to: S. C. Sealfon, Neurobiology, Box 1065, Mount Sinai School of Medicine, New York, NY 10029-6574. Email: sealfon@msvax.mssm.edu; FAX: 212-996-9785. *An Equal Opportunity Employer.* 

## Research Technician Laboratory of MicroChemistry

The Lindsley F. Kimball Research Institute, a division of the New York Blood Center, has a career-enhancing opportunity for a Research Technician in its Laboratory of MicroChemistry. The incumbent will participate in all aspects of the challenging research being conducted by the Laboratory, which synthesizes, purifies and characterizes biomolecules in collaboration with researchers at the Institute.

Applicants should have a minimum BS/BA in Chemistry or Biochemistry and related experience. Knowledge of peptide or oligonucleotide chemistry or solid phase synthesis, and a willingness to learn automated DNA sequencing and synthesis are required. Experience with HPLCs and computers, excellent organizational and communication skills, and a desire to conduct original research in the area of peptide chemistry will be expected.

This position commands a competitive salary and a comprehensive benefits package including full health coverage and liberal vacations. For immediate consideration, please send your CV to: Department JF, Human Resources, New York Blood Center, 310 E. 67th Street, New York, NY 10021; Fax (212)570-3195. An Equal Opportunity Employer M/F/D/V.

## **△Lindsley F. Kimball**

Research Institute
A Division of the New York Blood Center



## **Faculty Position**

The MIT Division of Toxicology at the Whitaker College of Health Sciences and Technology invites applications for a tenure-track faculty position at the Assistant Professor or nontenured Associate Professor level. Candidates should have doctoral education in biology, chemistry, biochemistry, medicine or toxicology. Research experience and interests should allow interactions with programs of other faculty members, the goals of which are: (i) to elucidate at cellular and molecular levels mechanisms through which chemical, biological and physical agents in the environment induce pathogenesis; (ii) to discover etiologic agents for environmentally related human and animal diseases; and (iii) to design and define mechanisms of action of novel and existing therapeutic agents for human and animal diseases. Responsibilities of the position include conduct of an active, independent program of research and participation in educational activities of the Division.

Applicants should submit a *curriculum vitae* and research summary and also arrange to have letters from three referees providing evaluations of previous accomplishments as well as potential for research and teaching sent to:

Gerald N. Wogan Chairman, Toxicology Search Committee Division of Toxicology Room 16-333 Massachusetts Institute of Technology

Massachusetts Institute of Technology Cambridge, MA 02139-4307

MIT is an Equal Opportunity/Affirmative Action Employer MIT is a non-smoking environment

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

## A Thriving Environment stWmD

The Everglades, Florida Bay, Loxahatchee, Kissimmee and Lake Okeechobee: the world of the South Florida Water Management District places our talented staff in an unparalleled environment for growth, development, breakthrough and discovery. Join us today, with opportunities available for:

## **Estuarine Ecologist** (Senior Environmental Scientist)

We're seeking an applied research scientist who will study ecotone community structure and ecological processes in the coastal lagoons and mangroves of Florida Bay. Minimum requirements include an MS degree with four years environmental science experience. We prefer an individual with a Ph.D in marine or wetland ecology with interests in seagrass or mangrove systems, trophic interactions, spatially articulate modeling, and field studies to characterize, understand, and predict the response of Florida Bay flora and fauna to various natural and anthropogenic stresses, including freshwater inflows and eutrophication. Advanced knowledge of statistics and modeling is preferred. Strong oral skills, a solid publication record, and management of research contracts will be required. Red #950367

## Wetland Hydrogeochemical Modeler

A research scientist is needed for a scientific team to study freshwater nutrient dynamics and ecological processes, develop spatially articulate hydrogeochemical models, and participate in large-scale gradient studies for the establishment of nutrient loading rules and sustainable hydrologic management for the Everglades. Minimum requirements include a MS degree with modeling experience. We prefer a wetland hydrologist or biogeochemist with a Ph.D and experience with spatial dynamic simulation, phosphorus chemistry, soil processes, and carbonate systems. Req #950368

Candidates applying for either of the two positions listed above should send a letter discussing research interests, a CV with your social security number, and the names, phone numbers, and addresses of three references to Linda Starr, Human Resources Division, South Florida Water Management District, 3301 Gun Club Road, West Palm Beach, FL 33416-4680. For more information, contact Dr. Fred Sklar at (407) 687-6504 (phone), (407) 687-6442 (fax), or e-mail at fred.sklar@sfwmd.gov. Deadlines for applications is October 20. The SFWMD offers competitive salaries, excellent benefits and a smoke-free work environment. New hires will be required to successfully complete a pre-placement drug test. Assistance will be provided for candidates with special needs due to disability.

## Wildlife Ecologist (Staff Environmental Scientist)

The Kissimmee River Basin Division of the District has a staff level opening for a wildlife ecologist to collaborate with an interdisciplinary research team on evaluation of ecological responses to the Kissimmee River restoration project. This position requires demonstrated expertise directing avian (particularly wading bird and waterfowl) studies in wetland systems. Some knowledge and experience conducting studies of small mammal and/or herpetological communities is also desired. Candidates must have a Bachelor's (Masters or Ph.D preferred) Degree and at least two years experience in wildlife biology or related field. Req #950693

For more information, contact Lou Toth at (407) 687-6615. The SFWMD offers competitive salaries, excellent benefits and a smoke-free work environment. New hires will be required to successfully complete a pre-placement drug test. Assistance will be provided for candidates with special needs due to disability. For consideration, send resume including social security # and Req # to Linda Starr, Hurnan Resources Division, South Florida Water Management District, 3301 Gun Club Road, West Palm Beach, FL 33416-4680.

## South Florida Water Management District

The SFWMD is committed to an environment enriched by diversity. We encourage inquiry from all applicants. EOE MF/DN

## POSTDOCTORAL POSITION MOLECULAR BIOLOGY

Position available immediately to study the role of BRCA1 in mammary gland development and carcinogenesis using molecular, cellular, and animal model systems (see *Nature Genetis* 11:17-26, 1995). Experience with immunocytochemical methods desirable. Experience in molecular biology required. Please send curriculum vitae and names of three references to: Dr. Lewis A. Chodosh, Institute for Human Gene Therapy, Stellar-Chance Laboratories, Room 309A, University of Pennsylvania, 422 Curie Boulevard, Philadelphia, PA 19104-6060

An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION open to study mechanisms of transformation of epithelium to mesenchyme (EMT). Genes that are turned on during EMT in the embryo and during induced EMT in vitro will be identified by in situ and subtractive hybridization techniques and their functions analyzed by transfection of embryonic cells. There will be an opportunity to learn cell biology methods, but previous experience with molecular biology techniques is highly desirable. Send curriculum vitae to: Dr. Elizabeth Hay, Department of Cell Biology, Harvard Medical School, 220 Longwood Avenue, Boston, MA 02115. FAX: 617-432-0407.

## POSTDOCTORAL POSITION MOLECULAR/CELL BIOLOGY

Position available for Ph.D. and/or M.D. to study vascular biology utilizing gene transfer technology. Areas of active interest include development of recombinant adenovirus systems for transfer of genes into the vascular wall, and application of gene transfer systems to animal models of vascular injury (atherosclerosis, restenosis). A strong background in molecular biology and cell biology, including tissue culture methods, is important.

Please send or FAX curriculum vitae, summary of research experience, and names and telephone numbers of three references to: Daniel Z. Fisher, M.D., Ph.D., Department of Medicine, Division of Cardiovascular Medicine, University of Massachusetts Medical Center, 55 Lake Avenue North, Worcester, MA 01655. Telephone: 508-856-5211. Equal Opportunity Employer/ Affirmative Action.

## POSTDOCTORAL FELLOWSHIP MUCOSAL IMMUNOLOGY

POSTDOCTORAL POSITION available immediately to study the molecular and cellular basis of murine intestinal intraepithelial lymphocyte development, function, and regulation. Applicants should have a Ph.D., M.D., or D.V.M. with a strong background in cellular immunology, molecular biology, or endocrine biology. Screening begins immediately and will continue until the position is filled. Send curriculum vitae and the names of three references to: Dr. John R. Klein, Department of Biological Science, University of Tulsa, 600 South College Avenue, Tulsa, OK 74104. FAX: 918-631-5005; Email: BIOL\_JRK@centum.utulsa.edu. The University of Tulsa is an Equal Employment Opportunity/Affirmative Action Employer.

## CELL BIOLOGY/IMMUNOLOGY

POSTDOCTORAL POSITION. A position is available for studies involving Toxcoplasma gondii host cell interactions. Multidisciplinary group with interests in attachment, invasion, motility, and immune response of the host to this intracellular parasite. Reply with curriculum vitae and summary of research interests to: Dr. L. H. Kasper, Dartmouth Medical School, Department of Microbiology, Hanover, NH 03755-3842. Dartmouth is an Equal Opportunity/Affirmative Action Employer. Women are encouraged to apply.

## POSTDOCTORAL RESEARCH SCIENTIST

Position available to study molecular aspects of radioresistance and radiation-induced changes in cell cycle progression in yeast and mammalian systems. Candidate should have a Ph.D. in molecular biology or a related field. Experience with recombinant DNA and yeast preferred but not essential. Send curriculum vitae, names and addresses of three references to: Dr. H. B. Lieberman, Center for Radiological Research, Columbia University, 630 West 168 Street, New York, NY 10032. An Equal Opportunity/Assignmentive Action Employer.

## **POSITIONS OPEN**

## POSTDOCTORAL POSITION IN PLANT VIROLOGY

Available immediately to study the biochemical and molecular basis of satellite RNA-mediated attenuation of disease symptoms in peanut stunt virus-infected plants. The project involves studies on RNA secondary structure, plant-virus interactions including RNA-RNA and RNA-protein interactions, and production of transgenic plants expressing viral/satellite RNA sequences. A Ph. D. in Molecular Plant Pathology or related field is required. Salary up to \$25,000 and commensurate with experience. Send application letter, curriculum vitae, three letters of recommendation to: Said Ghabrial, Department of Plant Pathology, University of Kentucky, Lexington, KY 40546. Telephone: 606-257-5969; FAX: 606-323-1961; Email: saghab00@ukcc.uky.edu. An Equal Opportunity Employer.

POSTDOCTORAL POSITIONS to study: 1) Mechanism of DNA repair by prokaryotic and eukaryotic DNA photolyases. Available immediately. Applicants should have a background in biophysics and enzymology or molecular biology. 2) Structure/function relationships in sarcosine oxidase, a heterotetrameric enzyme containing several redox centers (flavins, NAD) plus binding sites for tetrahydrofolate and other substrates. Available April, 1996. Experience in enzymology and molecular biology is required. Send curriculum vitae, including names and phone numbers of three references to: Dr. Marilyn Jorns, Department of Biochemistry, MS 411, Medical College of Pennsylvania and Hahnemann University, Broad and Vine, Philadelphia, PA 19102.

## POSTDOCTORAL POSITION SIGNAL TRANSDUCTION

Position available to study the role of receptor serine protein kinases in cellular signaling in plants. Applicants must have a Ph.D. in biochemistry, molecular biology or a related field. Prior experience in the area of signal transduction is desired. Send curriculum vitae, a brief statement of research interests and career goals, and names of three references to: Dr. John C. Walker, Division of Biological Sciences, University of Missouri, Columbia, MO 65211. FAX: 314-882-0123. An Equal Opportunity Institution.

POSTDOCTORAL POSITION available in the field of xenotransplantation with special emphasis on the elucidation of the role of complement in xenograft rejection. Candidates must be an M.D., Ph.D., or M.D./Ph.D., with strong background in immunology, biochemistry or molecular biology. Send curriculum vitae and names of three references to: Luis A. Valdivia, M.D., Ph.D., Pittsburgh Transplantation Institute, University of Pittsburgh, E-1546 Biomedical Science Tower, 200 Lothrop Street, Pittsburgh, PA 15261. FAX: 412-624-6666. Equal Opportunity Employer.

POSTDOCTORAL RESEARCH position available to study the mechanism by which integrin mediated cell adhesion generates signals which control myogenic cell differentiation and/or v-src oncogene initiated cell proliferation. Interested candidates should send curriculum vitae and names of three references to: David Boettiger, Department of Microbiology, University of Pennsylvania, Philadelphia, PA 19104-6021. Email: Boettige@mail.med.upenn.edu. The University of Pennsylvania is an Equal Opportunity/Affinnative Action Employer.

Department of Energy Distinguished Postdoctoral Research Program offers POSTDOCTORAL FEL-LOWSHIPS at DOE labs in Physical and Computer Sciences, and Engineering. \$52,800. Ph.D. after December 31, 1992. U.S. citizens or permanent residents only. Deadline: December 15, 1995. Application form required. Contact: DOE Distinguished Postdoctoral Research Program, Orise/Seed, P.O. Box 117, Oak Ridge, TN 37831-0117. Telephone: 615-576-9934.

## POSTDOCTORAL POSITION

POSTDOCTORAL POSITION available to study the function of cortactin in platelets. A Ph.D. in molecular biology or related field is required. Experience in mice preferred. Send curriculum vitae and three references to: Dr. Xi Zhan, Department of Experimental Pathology, Holland Laboratory, American Red Cross, 15601 Crabbs Branch Way, Rockville, MD. 20855. Equal Opportunity Employer, Minority/Fennale/Disabled/Veteran.

## **POSITIONS OPEN**

POSTDOCTORAL POSITIONS available immediately for work on chemosensory systems (Olfaction and Taste) with member(s) of the Chemosensory Training Group faculty in the Neuroscience Program, Florida State University. NIH funded (first-year rate; two years maximum); nust be U.S. citizen or pennaneut resident. Drs. R. J. Contreras, M. Meredith, J. C. Smith, P. Q. Trombley, G. Whitney. PREDOCTORAL TRAINEESHIPS also available. Contact individual faculty or Program in Neuroscience (4075), Florida State University, Tallahassee, FL 32306. Telephone: 904-644-3076/3427; Email: neuro@neuro.fsu.edu. Equal Employment Opportunity/Affinuative Action Employer.

## RESEARCH ASSOCIATE V (NMR FACILITY MANAGER)

The College of Basic Sciences at Louisiana State University is seeking applicants for the position of RE-SEARCH ASSOCIATE V (NMR facility manager). The facility consists of Bruker AM-400 and AMX-500 instruments equipped for multi-dimensional and multinuclear experiments and Silicon Graphics computers for off-line processing. Duties include training users, supervising other operators, facility maintenance, and application and development of new experiments and procedures. The Research Associate V (facility manager) will also work closely with another staff member in the operation of additional NMR spectrometers maintained by the Department of Chemistry. A Ph.D. in chemistry or biochemistry and two to four years of experience in the operation and maintenance of high-field FT-NMR spectrometers are required. Experience with multi-nuclear and multi-dimensional NMR applied to biological macromolecules, RF electronics, and Bruker NMR instru-mentation is desired. Application deadline is September 25, 1995, or until candidate is selected. Anticipated start date is October 2, 1995. Send application letter, curriculum vitae, and three recommendation letters to: Dr. Kathleen Morden, Department of Biochemistry, 322 Choppin Hall, Louisiana State University, Baton Rouge, LA 70803.

LSU is an Equal Opportunity/Affirmative Action Employer.

Pediatric Physician SCIENTISTS: The University of Kentucky College of Medicine is interested in recruiting pediatricians (M.D. or M.D., Ph.D.) who are committed to laboratory investigation in areas of oncology, neuroscience, endocrinology, infectious disease or pulmonary diseases as applied to pediatrics. Clinical area of interest should be related to one of the above or in neonatology or critical care. Modern laboratory space, protected time, joint clinical/basic science appointments, collaboration or mentorship by senior investigators, and substantial intramural funding is available. Junior investigators with potential for extramural funding or senior investigators with active funding are encouraged to apply. Interactions with other faculty in the clinical basic science departments as well as the Sanders-Brown Center on Aging, Markey Cancer Center, School of Biological Sciences and College of Agriculture provide a particularly stimulating clinical and research environment.

Interested individuals should send curriculum vitae and statement of past experience and future plans to: V. Mankad, Chairman, Department of Pediatrics, University of Kentucky Medical Center, 800 Rose Street, Lexington, KY 40536-0284.

## GEO-CENTERS, INC. RESEARCH SCIENTISTS

GEO-CENTERS, INC., a high technology R&D firm specializing in scientific and engineering services for the DoD and DoE, has challenging multidisciplinary research opportunities at its New Jersey location. Research involves developing new classes of chemical/biological microminiature detectors and integration with micro/opto-electronic circuitry to create biosensor components. The use of biological and polymeric materials for other device appliances will also be investigated. Successful candidates will have a Ph.D. in chemical, biological, or physical science/engineering specializing in immunochemistry, protein dynamics, biopolymers or biosensors and one to five years of directly related experience. GEO-CENTERS, INC. offers competitive salaries and comprehensive benefits package. Interested parties should send a résumé with salary history to: ATTN: Code RS, GEO-CENTERS, INC., 615 Hope Road, Building 3 A, Eatontown, NJ 07724. FAX: 908-542-1494. Equal Opportunity Employer/Affinnative Action Employer.

## DEPARTMENT OF BIOLOGY SIX NEW FACULTY POSITIONS THE UNIVERSITY OF CALIFORNIA, SAN DIEGO

## WE'RE DOING IT AGAIN!

UCSD Biology has a large and prestigious faculty spanning many areas of biological science and offers one of the most vigorous graduate programs in the country. Last year we initiated a major expansion making seven new faculty appointments, three at the Full Professor level and four at the Assistant Professor level. (An eighth is in progress.) Applications are now invited for six more appointments at the Assistant Professor level. In this round we are targeting immunology for two positions and prokaryote biology and plant molecular biology for one position each. In addition, we are recruiting for two positions as part of a new program we are initiating in understanding brain function and behavior. We expect to make more appointments in this and other areas over the next several years.

- 1. Two Assistant Professorial positions in Immunology. Individuals with a broad interest in the basic biology of immunity are encouraged to apply. Topics of interest may include: the function of cytokines and adhesion molecules in inflammation; signal transduction leading to lymphocyte activation; leukocyte development and function, protein trafficking related to receptor assembly or antigen presentation and molecular mechanisms of host and pathogen interactions. The successful candidate is expected to have an innovative, exciting research program that utilizes contemporary techniques in biochemistry, genetics, and cell biology.
- 2. Two Assistant Professorial positions as part of the new initiative in **Brain & Behavior**. Outstanding candidates are sought addressing important problems in any of a number of areas including CNS function in intact animals (imaging) or semi-intact brain preparations, computational analysis of CNS function, neuroethology, CNS molecular physiology, genetics of higher brain function, or invertebrate behavior.
- 3. An Assistant Professorial position in **Prokaryote Biology**. Exceptional candidates pursuing innovative approaches to any broad or fundamental aspect of the archaea and bacteria are encouraged to apply.
- 4. An Assistant Professorial position in **Plant Molecular Genetics.** Exceptional candidates pursuing important problems in any area of plant biology are encouraged to apply. Of particular interest will be candidates with innovative approaches to understanding signal transduction pathways and plant/pathogen interactions.

Ph.D., postdoctoral experience, and demonstrated ability to conduct an independent research program are required. Salaries will be commensurate with stature and based on the UC scale. Applications for these positions should be submitted by October 20, 1995. Please submit curriculum vitae, bibliography, statement of professional goals and research interests, and the names of three references to: Department of Biology 0346, University of California, San Diego, 9500 Gilman Drive, La Jolla, California 92093-0346. Please identify the position you wish to be considered for and indicate the journal advertisement to which you are responding.

The University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer.

## 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

## WE'RE CHANGING MILLIONS OF LIVES. NOW IT'S YOUR TURN.

At Lederle-Praxis Biologicals, we're pioneering the design, manufacture and marketing of vaccines so sophisticated, they're changing lives—right now.

Here, you'll help improve the quality of a lot of lives. Including your own. Our research facility, located in a suburb of Rochester, NY, is within easy reach of some of New York State's most attractive cultural, educational and recreational resources.

## RESEARCH SCIENTIST Immunology

Working in a multidisciplinary environment, you will interact with scientists from the Molecular Biology, Bacteriology, Virology, and Protein and Carbohydrate Chemistry Departments in the design and preclinical testing of prototype vaccine formulations.

To qualify, you should have a Ph.D (or equivalent) with 2 to 5 years' postdoctoral experience in humoral and cellular immunology. Knowledge of cytokine assays and molecular biology techniques would be an advantage.

At Lederle-Praxis, you'll enjoy a professional atmosphere and the kind of salary and benefits package you'd expect from an industry leader. Please send your resume to: Human Resources Department, Lederle-Praxis Biologicals, 211 Bailey Rd., West Henrietta, NY 14586-9728. An Equal Opportunity Employer M/F.



## Lederle-Praxis Biologicals

Protecting Families Through Immunization®

## ICN International Prize in Virology

**Inviting Nominations for 1995** 

The ICN International Prize in Virology recognizes long-term contributions in the field of virology.

The Prize, which consists of an award and \$50,000 U.S. in cash, honors the work of a researcher who has contributed significantly to the understanding of viruses and/or made major advances in the treatment or diagnosis of viral diseases.

The ICN International Prize is awarded annually, and researchers throughout the world in profit, nonprofit, and government organizations are eligible. Selection of the recipient is made by an independent committee of distinguished international scientists.

Previous recipients were Dr. Bernard Roizman, University of Chicago; Dr. Peter R. Vogt, University of Southern California; Dr. Robert M. Chanock, U.S. National Institutes of Health; Dr. Wolfgang K. Joklik, Duke University; Dr. John J. Skehel, National Institute for Medical Research, England; Dr. Bernard Moss, U.S. National Institutes of Health.

The Selection Committee seeks nominations for the 1995 ICN Prize. Nomination forms may be obtained from ICN Pharmaceuticals, Attention: Virology Prize, 3300 Hyland Avenue, Costa Mesa, California 92626, USA. The deadline for receipt of nominations is November 15, 1995. The recipient of the Prize will be announced early in 1996.

## ICN PHARMACEUTICALS, INC.

## NAVAL RESEARCH LABORATORY STENNIS SPACE CENTER, MS

## HEAD, OCEAN DYNAMICS AND PREDICTION BRANCH OCEANOGRAPHY DIVISION

The Naval Research Laboratory at the Stennis Space Center (NRL-SSC), one hour east of New Orleans, LA, seeks a Senior level scientist to head its Ocean Dynamics and Prediction Branch. The scientist will head a branch of nationally and internationally recognized scientists in performing basic and applied research in the areas of ocean and ice dynamics, computational numerical techniques, data assimilation, and the analysis of satellite oceanographic data as related to the development of ocean modeling and data assimilation capabilities.

As branch head, the applicant will be responsible for the planning, direction, formulation, and execution of the scientific goals of the branch, the administration of its programs and the supervision of its scientists and personnel. He/she will have the opportunity to pursue and direct research with access to substantial computational facilities: a Cray C90 at SSC; a Thinking Machines CM-200 and CM-5 at NRL-DC; an IBM SP-2 and an Intel PARAGON via the DoD High Performance Computing Network. Excellent facilities for analysis, video animation and graphical display, a satellite receiving and processing system and extensive data bases are also available.

Salary: \$70,482-\$91,629 (GS-15 Supervisory Oceanographer). Because of the interdisciplinary nature of the branch, the applicant should have a diverse background in one of the physical, computational or engineering sciences and substantial numerical computational experience. A Ph.D. is desired. In addition, the applicant should have a documented record of research publications, accomplishments and research team leadership.

U.S. citizenship and the ability to obtain a security clearance is required.

Submit a curriculum vitae, "Optional Application for Federal Employment" (OF-612), references, list of publications and statement of research interest by 29 September 1995 to: Naval Research Laboratory (Code 1870), (Attn: Lou Ann Lott, Annemt. 95-070), Stennis Space Center, MS 39529-5004. To receive a copy of the application form and announcement, please call Lou Ann Lott at (601) 688-5204.

NRL is an equal opportunity employer.

## THE UNIVERSITY OF WESTERN ONTARIO

## DEPARTMENTS OF CHEMISTRY AND EARTH SCIENCES

The Departments of Chemistry and Earth Sciences invite applications for a tenure track appointment at the Assistant Professor level in Analytical Environmental Chemistry and Geochemistry. The appointment will be held jointly between the Departments of Chemistry and Earth Sciences, and will involve teaching and research responsibilities in both areas. Candidates should have a Ph.D., show exceptional promise in research, and be strongly committed to teaching at the undergraduate and graduate levels. The applicant will be a key member of a group directing undergraduate and graduate programs in Environmental Science. Individuals with expertise in analytically based aspects of the chemistry and geochemistry of the environment are particularly encouraged to apply.

The Departments of Chemistry and Earth Sciences have modern analytical facilities suited to environmental chemical and geochemical studies, and also have ready access to modern surface analytical instrumentation. Besides developing a vigorous, independent research program, the successful applicant will also have the opportunity to collaborate with existing faculty in many areas of Environmental Science.

Applications, including curriculum vitae, publication list, statement of research plans and teaching interests, and names, addresses and telephone/telefax numbers of three referees, should be sent to Dr. Nils O. Petersen, Chair, Department of Chemistry or Dr. Fred J. Longstaffe, Chair, Department of Earth Sciences, The University of Western Ontario, London, Ontario Canada N6A 5B7. The deadline date for applications is November 30, 1995. For further details on Departmental facilities, undergraduate and graduate programmes, existing research activities, or other matters, please contact Drs. Petersen or Longstaffe.

Positions are subject to budget approval. In accordance with Canadian immigration requirements, priority will be given to Canadian Citizens and permanent Residents of Canada. The University of Western Ontario is committed to employment equity, welcomes diversity in the workplace, and encourages applications from all qualified individuals including women, members of visible minorities, aboriginal persons, and persons with disabilities.

## **Molecular Endocrinologists**

Merck Research Laboratories in Rahway, New Jersey, has several openings for doctoral-level scientists in our Molecular Endocrinology group — a top-notch team pursuing basic research oriented towards drug discovery for the therapy of diabetes, obesity and other metabolic disorders.

Successful candidates must have a Ph.D. or equivalent in Molecular and Cell Biology or Biochemistry and must have completed postdoctoral training in these or related disciplines. Additional professional experience and familiarity with the pathogenesis of endocrine disorders is desirable. A proven publication record and strong oral and written communications skills are required. Those with specific expertise in some of the following fields are particularly encouraged to apply:

**Fields** – Signal transduction, gene expression/nuclear receptors, protein sorting and trafficking, physiology and biochemistry of glucose metabolism.

**Techniques** — Cloning (potentially including expression- and subtraction-cloning), characterization and cloning of transcription factors, protein purification, yeast hybrid system, protein expression systems and whole animal tracer infusion (cuglycemic clamp, etc.).

Merck Research Laboratories, a division of Merck & Co., Inc., is located approximately 25 miles from New York City. Our salaries, benefits and growth potential are excellent. For consideration, please send your resume with the names of three references to: Human Resources, Merck Research Laboratories, P.O. Box 2000, RY80-A3, Ad #S-166, Rahway, NJ 07065. We are an affirmative action/equal opportunity employer M/F/D/V.



National Institute of Allergy and Infectious Diseases National Institutes of Health

## NIH SEEKS TWO SCIENTISTS/PHYSICIANS FOR EXTRAMURAL BASIC IMMUNOLOGY BRANCH

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.

Responsibilities include providing professional and scientific leadership on a broad array of activities necessary for the planning, evaluation, direction and coordination of the Basic Immunology Branch and its Molecular and Structural Immunology Section. We offer competitive salaries and outstanding benefits.

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:

Personnel Office
PHS/NIH/NIAID
Bldg. 31, Room 7A-20
9000 Rockville Pike
Bethesda, MD 20892
Announcement No Al-95-075/Al-95-076
Telephone#: 301-402-1421
Fax#: 301-496-1940
ATTN: Kristie Daniel

U.S. Citizenship required.
NIH is an Equal Opportunity/Affirmative Action Employer

## Columbia University College of Physicians and Surgeons Department of Biochemistry and Molecular Biophysics

We seek outstanding candidates for faculty positions in biochemistry and molecular biology. Both tenure-track and tenured positions are available.

We are recruiting researchers with interests in signal transduction, cell cycle control, intercellular communication, transcriptional regulation, and enzymology and enzyme mechanisms. We are also interested in scientists who plan to combine organic and physical chemical methods with molecular biology in order to solve fundamental biological problems.

Candidates should submit a curriculum vitae, bibliography, summary of current and future research goals, and three letters of recommendation. Applications should be addressed to: Max Gottesman, Molecular Biology Search Committee, Department of Biochemistry and Molecular Biophysics, Columbia University, 630 West 168th Street, New York, NY 10032.

Columbia University is an equal opportunity/affirmative action employer.

## **PROFESSOR**

## Cardiovascular Research Program

The Departments of Cell Biology and Cardiology have an opening for a Professor at Harvard Medical School to lead the Cardiovascular Research Program of the Department of Cardiology at Children's Hospital. We seek a distinguished Ph.D. or M.D. scientist to provide scientific leadership and attract external funding in molecular cardiology. The successful candidate will direct a program in normal and abnormal cardiovascular development with an emphasis on science basic to childhood cardiovascular disease. Areas of particular interest include developmental biology, cell electrophysiology, signal transduction, cell cycle regulation, structural biology, vascular biology, human genetics and gene regulation. The individual will also provide leadership in the teaching of cell biology at the Harvard Medical School, as well as providing advice, direction and mentorship to trainees. The candidate should be capable of leading the Department to a position of scientific prominence, and should have demonstrated experience and excellence in teaching, as well as the strong leadership qualities and administrative skills necessary to develop the research effort.

Applications, including a current c.v., bibliography and research interests should be sent to: Dr. James Lock, Co-Chair of the Search Committee, Children's Hospital, Department of Cardiology, Farley 217, 300 Longwood Avenue, Boston, MA 02115. Harvard University and Children's Hospital are Equal Opportunity/Affirmative Action Employers and encourage the application of qualified women and minorities.

## HARVARD MEDICAL SCHOOL



## **FACULTY POSITIONS IN GEOPHYSICS**

### The University of Western Ontario

The Department of Earth Sciences, The University of Western Ontario, invites applications from qualified individuals for two tenure track appointments in Geophysics at the Assistant Professor level, with specialization in (a) seismology or (b) the physics of earth materials, including high pressure geophysics. Sound training in most major aspects of geophysics, as well as a good grounding in geology are prerequisites for these positions. Applicants in specialization (a) should have experience in one or more of global, earthquake, crustal, upper mantle, exploration or environmental seismology. Applicants in specialization (b) should have a strong experimental and theoretical background, and research focused on one or more of the Earth's mantle and core, other planetary interiors or physical properties of minerals, rocks and melts. Successful candidates are expected to pursue vigorous, independent research programs that complement current Departmental activities in observational and theoretical seismology, experimental mineral physics, material science and petrology, and to interact with other disciplines in the Department. Moreover, successful candidates are expected to teach several of the customary undergraduate Geophysics courses, graduate courses in their areas of specialization, and to contribute to other Departmental

The Department has nineteen faculty members (five in Geophysics), more than fifty graduate students, and offers undergraduate and graduate programs in Geology, Geophysics and Environmental Earth Sciences. A wide array of modern research facilities are available, including seismic workstations and high pressure/temperature laboratories that include two cubic anvil presses of 200 and 1,000 ton capacity. The Department operates a seismic network in southwestern Ontario.

Applicants, who hold the Ph.D. degree, or equivalent, should write to Dr. F. J. Longstaffe, Chair, Department of Earth Sciences, The University of Western Ontario, London, Ontario Canada N6A 5B7 by November 30, 1995 Letters of application should include a full curriculum viae, a statement not to exceed 500 words, explaining how their background and research interests qualify them for one of these positions, and the names, addresses and telephone/telefax numbers of at least three appropriate external referees.

Positions are subject to budget approval. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian Citizens and Permanent Residents of Canada. The University of Western Ontario is committed to employment equity, welcomes diversity in the workplace, and encourages applications from all qualified individuals including women, members of visible minorities, aboriginal persons, and persons with disabilities

## **Department Head Position**

Professor and Head Department of Entomology: The College of Agriculture at the University of Arizona invites applications and nominations for the position of Head of the Department of Entomology. The successful candidate is expected to provide strong innovative interdisciplinary leadership in the areas of research, teaching and extension. The candidate should have excellent research credentials in an area that would be considered part of a modern department of entomology, e.g., ecology, behavior, pest management, insect/plant interactions, molecular and cellular biology, and physiology. The department consists of 23 faculty members (6 of whom are joint appoints from other departments) who reside either on campus or at two off-campus experiment stations located in southern Arizona. The Department of Entomology has a commitment to both basic and applied research. It maintains strong ties with the Center for Insect Science and similar academic units as well as with the agricultural industry of the state of Arizona. This appointment will be available on or after July 1, 1996. A Ph.D. in entomology or a related discipline is required. Evidence of administrative ability is essential. The successful candidate will be expected to maintain an active research program. The position also requires experience in or knowledge of undergraduate/graduate teaching and university-based extension programs. The salary will depend upon qualifications and experience. Applicants should submit a current curriculum vitae, the names, addresses and telephone numbers of six references, and a statement of qualifications and goals to Dr. Robert T. Leonard, Chair, Entomology Search Committee, Department of Plant Sciences, The University of Arizona, Tucson, AZ 85721. Application Deadline: The committee will begin considering applications on October 20, 1995, but will accept applications until a suitable candidate has been identified. THE UNIVERSITY OF ARI-ZONA IS AN EEO/AA/ADA EMPLOYER. WOMEN AND MINORITIES ARE ENCOURAGED TO APPLY.

## Molecular Neurobiology/ Neurodegenerative Disease

A FACULTY POSITION is available at the junior or senior level in molecular neurobiology, with particular interest in neurodegenerative and neuromuscular disease, signal transduction mechanisms, including synaptic function, and the role of the neuronal cytoskeleton in pathogenesis. Other areas which fortify and complement existing research strengths in cell and neurobiology will be considered; the use of molecular, genetic and transgenic approaches are also desirable. Appointments carry institute-backed salary guarantees and liberal start-up packages for personnel, equipment and operating costs.

Submit a detailed *curriculum vitae*, a one-page summary of research interests and future research plans, and three letters of recommendation to:

Dr. Richard Vallee, Scientific Director c/o Human Resources - Search 1 The Worcester Foundation for Biomedical Research 222 Maple Avenue Shrewsbury, MA 01545



Review of applications will begin October 15, 1995. An Affirmative Action/Equal Opportunity Employer.

## DEVELOPMENTAL BIOLOGY UNIVERSITY OF MICHIGAN

The Department of Biology at the University of Michigan solicits applications for a tenure-track faculty position. We anticipate hiring at the ASSISTANT PROFESSOR level, but outstanding candidates at higher levels may be considered. We seek individuals who use molecular and genetic approaches to analyze animal development. The successful candidate must have Ph.D. in Biology, Genetics, or related field, and postdoctoral experience. The successful candidate will join an expanding group of cellular and molecular biologists interested in the development of C. elegans, Drosophila, zebrafish, Xenopus, chick and Arabidopsis. In addition to establishing a successful research program, the candidate will be expected to participate in undergraduate and graduate teaching of the department. To apply, send a C.V., copies of reprints, brief summaries of present research and future research plans and arrange to have three letters of reference sent directly by October 16, 1995.

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

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

## VANDERBILT CENTER FOR LUNG RESEARCH (VCLR) PROGRAM IN HUMAN GENE THERAPY

Seeks a Ph.D. Molecular Biologist at the Assistant or Associate Professor level to: 1) provide basic science support for a growing program investigating the efficacy of in vivo gene transfer in the treatment of diseases of the lungs, 2) serve as a general core resource to all investigators in the Center for Lung Research and 3) conduct independent, high quality research in some area of Molecular Biology. Tangible evidence of competitiveness for this positon includes publications in prestigious journals and competitively awarded research funding support. The VCLR is a multidisciplinary group of investigators interested in understanding the functions and dysfunctions of the lungs and in developing imaginative therapies for the treatment of lung diseases. Research spans the spectrum from basic investigation to clinical trials of new therapies. The Program in Human Gene Therapy is a major thrust of developing Center activities. Vanderbilt University is an equal opportunity employer and, accordingly, women and minorities are encouraged to apply. Letters of application and curriculum vitae and bibliography should be sent to Kenneth L. Brigham, M.D., Director, Vanderbilt Center for Lung Research, T-1217 Medical Center North, Vanderbilt University, Nashville Tennessee, 37232.

## Director **Appalachian Environmental Laboratory** University of Maryland Center for **Environmental and Estuarine Studies** Frostburg, Maryland

The University of Maryland Center for Environmental and Estuarine Studies (CEES) is seeking a Director of its Appalachian Environmental Laboratory. The Director is the chief academic officer of the Laboratory and reports directly to the President of CEES. She or he has responsibility for: planning and implementing program direction, administering facilities, and developing and overseeing the laboratory budget. This position offers an outstanding opportunity to build an eminent research and educational program focusing on upland environments and their relationships to the coastal

CEES, a research and service institution of the University of Maryland System (UMS) is comprised of the Appalachian Environmental Laboratory (AEL), the Chesapeake Biological Laboratory (CBL) at Solomons, and the Horn Point Environmental Laboratory (HPEL) at Cambridge. AEL focuses on terrestrial and freshwater ecosystems while the other two laboratories have prominent strengths in coastal, estuarine and marine science. The Center has 75 faculty members and over 150 graduate students pursuing M.S. and Ph.D. degrees in the environmental sciences.

AEL is located at Frostburg in western Maryland. The Laboratory presently has 11 AEL Is located at Prostourg in Western Marylain. The Laboratory presently has I faculty. The new Director will be involved in proposed faculty expansion, AEL research programs include community ecology, conservation biology, toxicology, behavioral and evolutionary biology, and wildlife ecology. AEL has recently undertaken an initiative in multidisciplinary research on the landscape ecology of the Chesapeake Bay watershed, with recent faculty additions having expertise in landscape ecology, hydrology, and atmospheric interactions. State funds have been appropriated for the design of a new \$17 million facility to house AEL. This facility is scheduled for completion in 1999 and will also house collaborative research and education programs involving the Maryland Agricultural Experiment Station and Frostburro State grams involving the Maryland Agricultural Experiment Station and Frostburg State University.

Candidates must have an earned doctorate and an established record of scholarly contributions in environmental sciences commensurate with appointment to the tenure rank of Professor. Candidates should have administrative experience or experience directing multidisciplinary research programs. Applicants should submit a letter of interest, a curriculum vitae, relevant reprints, and five references to:

> Dr. Kenneth R. Tenore Chair, AEL Director Search Committee UMCEES - Chesapeake Biological Laboratory P.O. Box 38 Solomons, Maryland 20688.

To insure full consideration applications must be received by 15 November 1995. Anticipated appointment is July 1996.

CEES is strongly committed to diversity: women and minority candidates are encouraged to apply. AA/EOE

Bristol-Myers Squibb Pharmaceutical Institute in Syracuse, NY, has an opening in its Drug Metabolism and Pharmacokinetics group for a scientist to develop/validate enzyme immunoassays for quantitating biologicals in biofluids.



## Bristol-Myers Squibb

## ASSOCIATE RESEARCH **SCIENTIST**

## Drug Metabolism & **Pharmacokinetics**

Responsibilities also include providing analytical support for clinical and pre-clinical studies of BMS biological drug candidates, and in the determination of the functional characteristic of the biologic following drug administration.

The qualified candidate should have a BS/MS degree with 2-4 years experience in enzyme immunoassay techniques, monoclonal antibody usage, western blot analysis, tissue culture and hybridoma technology. Knowledge of cell based or flow cytometric techniques is also desirable. Must have the ability to accomplish and assign well defined objectives and carry out these experiments effectively and efficiently. Must be open to relocation to New Jersey in the future.

We offer an excellent salary and comprehensive benefits. For consideration, forward your resume with salary requirements to: Manager Human Resources, BRISTOL-MYERS SQUIBB, Position #SY-950056, P.O. Box 4755, Syracuse, NY 13221-4755.

Equal Opportunity Employer, M/F/D/V

THE UNIVERSITY OF TEXAS - HOUSTON HEALTH SCIENCE CENTER



TENURETRACK FACULTY POSITIONS available June 1996, for an expanding departmental focus in SIGNAL TRANSDUC-TION. Individuals working in the general area of KINASES AND PHOSPHATASES, are especially encouraged to apply, but outstanding applicants in all areas of research are welcome. Candidates must be using state-of the-art approaches to define molecular mechanisms affecting cell regulation. Responsibilities include the development of a funded, internationally recognized research program and participation in medical and/or graduate education. Positions are in the Texas Medical Center, a superb research environment that includes the UT-Houston Health Science Center, Baylor College of Medicine, and M.D. Anderson Cancer Center. Further information can be obtained at our www site "http://farmr4.med.uth.tmc.edu". Send a cover letter of introduction, CV, 2-3 page summary of research plans, and names, addresses, and phone numbers of 4 potential references to Dr. Fernando Cabral, Department of Pharmacology, University of Texas Medical School at Houston, P.O. Box 20708, Houston, Texas 77225. Review of applications will begin on October 10, and continue until the positions are filled. The University of Texas is an Equal Opportunity Employer. Women and minorities are encouraged to apply

## **NEUROSCIENCE** and **CELL BIOLOGY**

## ROBERT WOOD JOHNSON MEDICAL SCHOOL

New tenure track positions at junior and senior ranks are available in Neuroscience and Cell Biology at The University of Medicine and Dentistry of New Jersey's Robert Wood Johnson Medical School. Scientists will be located at Robert Wood Johnson Medical School on the scientific Busch Campus in the New Brunswick/Piscataway area. Investigators with interests in neural plasticity, molecular neurobiology, cellular and developmental neurobiology and the re-lationship of biology to behavior and mentation are encouraged to apply. Application Deadline is November 1, 1995.

Please submit a curriculum vitae, summary of scientific interests and goals, and 3 letters of reference to: Dr. Ira B. Black, Chairman, Department of Neuro-science and Cell Biology, UMDNJ-Robert Wood Johnson Medical

School, 675 Hoes Lane, Piscataway, New Jersey 08854-5635. The UMDNJ is an Affirmative Action/Equal Employment Opportunity Employer, M/F/D/V, and a member of the University Health System of New

## **Cell Biology**

A FACULTY POSITION supported by the Markey Charitable Trust is available at the junior or senior level in cell biology. Areas of particular interest include cell growth control, the cell cycle, signal transduction mechanisms, and cancer, but other areas which fortify and complement existing research strengths in cell and neurobiology will also be considered. Direct relevance to problems of medical interest, and the use of molecular, genetic and transgenic approaches are desirable. Appointments carry institute-backed salary guarantees and liberal start-up packages for personnel, equipment and operating costs.

Submit a detailed cirrculum vitae, a onepage summary of research interests and future research plans, and three letters of recommendation to:

Dr.Richard Vallee, Scientific Director c/o Human Resources - Search 2 The Worcester Foundation for **Biomedical Research** 222 Maple Avenue Shrewsbury, MA 01545



Review of applications will begin October 15, 1995. An Affirmative Action/Equal Opportunity Employer.

## RED-CELL

RedCell Inc., a biotechnology company is seeking exceptional individuals to participate in pioneering new chemical and biological research technologies targeting drug design and delivery.

## Director of Medicinal Chemistry

This position requires a Ph.D. in Organic Chemistry, and a minimum of 8 years of pharmaceutical industrial experience. Ideal candidate will possess established expertise in organic synthesis, experience in combinatorial chemistry and structure-based design/molecular modeling as well as bioconjugation. Demonstrated leadership and managerial capabilities are essential.

## Synthetic Organic Chemists

Responsibilities will include conducting multi-step synthetic sequences and isolating and purifying reaction products. Knowledge of chromatographic techniques, and the ability to interpret spectra (IR, NMR, & MS) are required. Candidates should have a BS or MS degree in Synthetic Organic Chemistry.

• Biochemists/Biologists-Assay Development and Screening-Innovative approach to screening requires both Ph.D. and B.S. level personnel with significant experience and expertise in assay development and high throughput screening of compounds, especially combinatorial libraries. Experience in enzyme and immuno-assays and robotics/automation techniques are a distinct advantage.

All applicants must have relevant work experience and strong interpersonal and organizational skills.

We offer an energetic environment in the San Francisco Bay Area and an opportunity for research in a rapidly changing field. Competitive salary and benefits. EOE employer. Fax cv and references to (415) 827-0123 or E-Mail to hr@redcell.com.

## HEAD OF RESEARCH SECTION ON EUKARYOTIC DNA REPLICATION

NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT, NIH

A position is available in the Laboratory of Molecular Growth Regulation, National Institute of Child Health and Human Development, to head an independent Research Section. Appointment to this position will be at the most senior level and will entail full tenure at the NIH. The applicant must have an established international reputation as a leader in the field of DNA replication, and must have a primary interest in defining the structural and functional characteristics of the origins of DNA replication in higher eukaryotes. Salary range is \$120,000 to \$148,400, depending on qualifications. Resources for the proposed Section include: i) laboratory space sufficient for four researchers (including lead investigator); ii) salaries for two post-doctoral fellows and one technician; and iii) an annual operating budget of \$150,000 to \$200,000 (exclusive of salaries). Ph./D. or equivalent required. Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, religion, gender, national origin, politics, marital status, physical or mental disability, age, sexual orientation, membership or non-membership in an employee organization.

To apply, please send curriculum vitae, reprints, description of relevant research experience and a list of references to:

Dr. Bruce Howard, Chief, Laboratory of Molecular Growth Regulation, DHHS, PHS, NIH, National Institute of Child Health and Human Development, Building 6, Room 416, 6 CENTER DR MSC 2753, BETHESDA, MD 20892-2753.

Applications must be received by October 6, 1995.

NIH/NICHD is an Equal Opportunity Employer

## FACULTY POSITION IN COMPARATIVE MEDICINE VETERINARY PATHOLOGIST

Department of Comparative Medicine Stanford University School of Medicine

The Department of Comparative Medicine has a faculty opening for a veterinary pathologist. The position will be at the rank of Assistant Professor in the Medical Center Professoriate. Candidates must have received the D.V.M. or V.M.D. degree (or equivalent) from an institution accredited by the American Veterinary Medical Association and must be a diplomate of the American College of Veterinary Pathologists. Applicants should have a demonstrable interest in comparative medical research as evidenced by publications in peer-reviewed journals. Preference will be given to those individuals with a Ph.D. and experience in rodent biology and the use of animal models. The successful candidate will be experienced in supervising a technical staff and will have applied current techniques in diagnostic pathology, e.g. electron microscopy, immunocytochemistry, in situ hybridization, molecular biology, to problems in comparative medicine.

The Department of Comparative Medicine is a basic science department within the School of Medicine. In addition to its academic functions, it also provides the clinical care and management for a large, modern, AAALAC-accredited, central animal facility which includes a critical care unit staffed by veterinary technicians. The role of the veterinary pathologist is to support the diagnostic, teaching, and training activities of the animal facility and to engage in collaborative research in ongoing research projects. Collaborative research opportunities at Stanford include neuroscience, organ transplantation, immunology, genetics, infectious diseases, molecular biology, canine inherited diseases, anestnesia, primate behavior, and transgenic mouse studies among others. Stanford University is committed to increasing representation of women and members of minority groups on its faculty, and particularly encourages applications from such candidates. Interested candidates should send a letter containing a description of their career goals and research interests, ferences, to: Linda C. Cork, D.V. M., Ph.D., Professor and Chairman, Department of Comparative Medicine, MSOB X347, Stanford University Medical Center, Stanford, CA 94305-5415

## MOLECULAR TOOL, LLC.

Molecular Tool is a biotechnology company located on the Hopkins Bayview Research Campus in Baltimore, Maryland committed to the development and commercialization of highly integrated, DNA-based systems for the analysis and interpretation of genetic variations. Molecular Tool has openings for the following positions.

## SCIENTIST-NUCLEIC ACID BIOCHEMIST

This individual must have Ph.D. in Biochemistry or related field and 0-5 years postdoctoral experience in nucleic acid biochemistry and enzymology. The selected candidate will work with a multidisciplinary team on the development of genetic analysis technologies and products, including DNA polymerase reaction optimization, miniaturization of oligonucleotide assays, and development of solid phase quantitation and genotyping methods.

## RESEARCH ASSOCIATE

Responsible for test development, performing routine processing, operations, trouble-shooting operational processes and QC/QA testing. Must have MS in Chemistry, Biology or related field. Knowledge of basic molecular biology techniques; ability to learn and understand new technologies; and at least 2 years experience in research & development desired. Computer skills a plus.

Please forward two copies of your resume along with three references and salary history to Human Resources, Molecular Tool, Alpha Center, 5210 Eastern Avenue, Baltimore, MD 21224. EOE

## NATIONAL INSTITUTES OF HEALTH

The Molecular Biology and Gene Regulation Section, Diabetes Branch, National Institute of Diabetes and Digestive and Kidney Diseases seeks an outstanding candidate with a Ph.D. and/or M.D. and at least five years of postgraduate training, to participate in a research program studying gene regulation in the adipose cell. The applicant should have an interest and considerable experience in molecular biology, pharmacology, and biochemistry (protein purification/characterization). Research experience cloning transcription factors and studying hormonal regulation of gene expression must be proved by publications or preprints. Starting salary is \$40,000 -\$45,000, which may be negotiable depending on qualifications. Applicants must be U.S. citizens or permanent residents. Interested candidates should submit a curriculum vitae, several reprints, a summary of research interests, and the names of three references within 30 days of publication

Marc Reitman, M.D. Ph.D. National Institutes of Health Bldg. 10, Room 8N-250 10 Center Drive MSC 1770 Bethesda, MD 20892-1770



## BIOLOGY DEPARTMENT THREE FACULTY POSITIONS

The Biology Department at Syracuse University, with established research strengths in population biology, and cell and molecular biology, and with unique research interactions between these areas, invites applications for three tenure track positions described below. The Department has excellent research facilities, one third of which were extensively renovated recently. We anticipate appointing three outstanding individuals for the 1996-97 academic year, one at the Assistant Professor level and two at either the Assistant or Associate Professor level. Successful candidates will be expected to establish and maintain vigorous research programs and to attract extramural support. Substantial time will be available for research; and participation in teaching undergraduate and graduate students is expected.

MOLECULAR/CELLULAR BIOLOGISTS: We expect to appoint two Molecular/Cellular Biologists. Examples of research areas we would welcome include transcription, the cell cycle, signal transduction, and intracellular trafficking. Apply to: Dr. Shozo Yokoyama at the address listed below.

**POPULATION BIOLOGIST:** We anticipate appointing an individual with interests in evolution or ecology. Apply to: Dr. Sam McNaughton at the address listed below.

We are more concerned with the quality of the applicants than their specific areas of research specialization, but we hope to appoint individuals whose field of interest and expertise complement those currently represented among our faculty. Information about the department is available at: http://web.syr.edu/.biology and http://www.syr.edu/.

Applications should include curriculum vitae, description of proposed research program, and names and addresses of three Scientists whom we can contact for letters of recommendation. Applications should be addressed to the individuals listed above with the position of interest described, at: Biology Department, Syracuse University, 130 College Place, Syracuse, NY 13244-1220. All applications received by December 31 will be given full consideration. Syracuse University is an Equal Opportunity/Affirmative Action Employer. Women and members of traditionally underrepresented groups are encouraged to apply.



Amoco's Environment, Health and Safety Department in Chicago, Illinois has a position available in its Product Registration and Toxicology Division.

The position involves the evaluation of toxicological information, communication of toxicological information to business clients and customers, coordination and review of toxicology testing, and representation of Amoco in industry trade association activities.

Applicants must have a degree in Toxicology or related field (Ph.D. preferred). Desire individual with industry experience and knowledge of health risk assessment. Strong oral communication and writing skills are essential.

Amoco offers an excellent compensation and benefits package. For consideration, reply with resume and salary history to:



## AMOCO CORPORATION

Mail Code P069M4 130 East Randolph Drive Chicago, IL 60601

Equal Opportunity Employer

## Plant Transformation Facility

## **Iowa State University**

Iowa State University is establishing a service facility for the transformation of crop plants and is seeking candidates for three positions:

Facility Director: This Ph.D.-level scientist will be responsible for the overall management of the service facility and will provide scientific direction by conceiving scientific objectives, conducting research, writing grant proposals and sharing knowledge based upon successful and significant experience in the transformation of maize or soybean.

**Transformation Specialists:** These M.S./Ph.D.-level scientists will transform and regenerate maize or soybeans using constructs provided by users. Candidates must have experience in the transformation and regeneration of maize or soybean. Two positions are available-a maize specialist and a soybean specialist.

Applicants should send a cover letter that indicates the position of interest, a summary of transformation experience, relevant reprints, resume, and the names and addresses of three potential referees to: Dr. Patrick S. Schnable, Chair, PTF Search Committee, 2101 Agronomy, Iowa State University, Ames, IA 50011 USA.

Review of applications will begin 1 October 1995 (Director) and 1 November 1995 (Transformation Specialists) and will continue until the positions are filled. Further information may be obtained via e-mail: schnable@iastate.edu, FAX: 515-294-2299, or the WWW at URL:

http://www.public.iastate.edu/~schnable/transform.html

Iowa State University is an Equal Opportunity/Affirmative Action Employer.

Announcing applications for:

## THE CHILDREN'S BRITTLE BONE FOUNDATION FELLOWSHIP \$50,000/year award for two years.

The Children's Brittle Bone Foundation announces the third international competition for fellowships to study the pathogenesis and treatment of osteogenesis imperfecta. The CBBF hopes to fund two different types of proposals this year: one focused on long term scientific issues in OI which will hopefully lead to treatment or cure, and the other focused on approaches which might have a more immediate impact on the clinical care and treatment

Each grant is for a maximum of \$50,000 which can be used for salary, fringe benefits, and research funds. Applicants may hold either a Ph.D. or M.D. and be in postdoctoral training or hold a junior faculty position.

A second year of support will be available based on evidence of continued progress.

If the applicant is a postdoctoral fellow, a letter of support from the preceptor along with evidence of the preceptor's external funding for related scientific research is required with the full application.

Applications available: October, 1, 1995 Filing Deadline: January, 15, 1996 Fellows Notified: April 23, 1996

Write to:
CBBF
Attention: Grants and
Awards
P.O. Box 27
Highland Park, IL 60035
USA

CHILDREN'S BRITTLE BONE FOUNDATION

## TOXICOLOGY RESEARCH

Several positions are available in the Toxicology Research Laboratory, University of Illinois at Chicago at the postdoctoral and Research Assistant Professor levels. The Laboratory combines basic and applied (GLP) research activities within a university environment.

### GENERAL TOXICOLOGY

Research Assistant Professor needed to conduct preclinical toxicology studies for government and industry sponsors in accordance with FDA GLPs. The successful candidate will also establish a basic research program in his/her field of expertise. A Ph.D. is required, and experience or interest in safety assessment is preferred.

### NEUROTOXICOLOGY

Research Assistant Professor and Postdoctoral Research Associates (2) needed to study toxic interactions among selected neurotoxic chemicals including anticholinesterases and pyrethroids using a variety of techniques. A Ph.D. is required, and experience in cholinesterase assays, neurobehavioral testing, receptor binding, and/or cell culture assays is preferred.

### DRUG METABOLISM

Postdoctoral Research Associate needed to study the metabolism and toxicity of organophosphorus insecticides and selected xenobiotics in animal models. A Ph.D. is required, and experience in HPLC methodology, enzymology and drug metabolism is preferred.

Please submit curriculum vitae, brief summary of research interests and three references to:

Dr. Barry S. Levine, Director Toxicology Research Laboratory Department of Pharmacology (M/C 868) University of Illinois at Chicago (UIC) 1940 W. Taylor St. Chicago, IL 60612-7353

UIC is an Affirmative Action/Equal Opportunity Employer

**UIC** The University of Illinois at Chicago

## DESERT RESEARCH INSTITUTE

## ASSISTANT RESEARCH PROFESSOR ENERGY & ENVIRONMENTAL ENGINEERING CENTER

RENO, NEVADA VACANCIES

Position will capitalize on research opportunities in fugitive dust emissions and control, air pollution field studies and analysis of suspended particle data sets. Duties include the design and execution of field studies, development of theoretical and empirical models for dust suspension and transport, creation of new measurement technologies for process based wind-blown dust and analytical methods to characterize physical and chemical properties of dust. Position involves proposal preparation and advancement, and is dependent on the procurement of external funding sources. Successful candidate will prepare reports for sponsors and actively publish results in peer-reviewed literature. Requires recent doctoral degree in a physical science or engineering with emphasis in dust suspension, micrometeorolgy, emissions estimation and pollution control; experience in the organization and execution of field monitoring studies, data analysis and modeling; and demonstrated skills in written and oral communication. A record of previous publications and presentations and successful proposal preparation desirable.

## ASSISTANT OR ASSOCIATE RESEARCH PROFESSOR ATMOSPHERIC SCIENCES CENTER

Design, develop and execute original research in the atmospheric sciences, Must show an ability and a record of successful grants and contracts funding and make a substantial contribution to the atmospheric sciences graduate program through teaching and the mentoring of students. Current research specialities are: Cloud physics, atmospheric chemistry, weather modification, direct and remote sensing, aerosol and cloud chemistry, mesoscale modeling and climatology. Requires doctorate in atmospheric sciences or a related discipline; high probability for successful extramural funding; proven record of publication and research management; experience or interest in participating in the teaching program for atmospheric sciences; and good communication skills.

Review of applications begins 11/3/95 and continues until filled. Salaries are competitive and commensurate with qualifications. DRI offers an excellent benefits package, Send letter of application describing your qualifications, research plans, likely funding sources and listing of 3 references to: Recruitment Office, Desert Research Institute, University & Community College System of Nevada, P.O. Box 19040, Las Vegas, NV 89132-0040. DRI is an affirmative action/equal opportunity employer.



## School of Medicine

## **CANCER RESEARCH FACULTY POSITIONS**

Faculty positions are available in basic cancer research. Assistant Professor level investigators would have the opportunity to establish an independent tenure-track research program. Associate Professor level candidates will be considered, but tenured positions require an established, funded research program. Research themes of the Division of Molecular Oncology include cancer genetics, oncogene molecular biology, murine developmental biology, cell cycle regulation, signal transduction, viral oncogenesis, DNA recombination and repair, tumor immunology and cell death.

Interested applicants should forward a C.V. and bibliography together with three names of reference to:

Stanley J. Korsmeyer, M.D.
Division of Molecular Oncology
Washington University School of Medicine
660 South Euclid Avenue, Box 8069
St. Louis, MO 63110

Washington University is an equal opportunity employer

## GLOBAL CAREER OPPORTUNITIES

## 次のチャレンジはもう始まっている。

バイエル薬品中央研究所は"世界のバイエル"の新たな核になる。 そして、その豊かな研究開発環境のもとで生まれる新薬は 世界へと広がっていくことだろう。



## 海外留学生セミナー [会場] ニューヨーク: 1995 年11 月24 ~ 26 日(予定) 東京 / 大阪: 1995 年12 月、1996 年1 月 [資格] 下記関連分野を研究されている方で、1996 年内に日本以外の大学を 卒業予定の方、修工以上歓迎 日本語・英語を賞 【申込】 風懸書・研究概要を日本語・英語で成して同合せ先】宛送付して下さい。 帰国日明記 書類選考の上、セミナーのご案内をします。 ※開催国内の旅費を一部援助します。

## 研究員募集中

【分野】アレルギー、自己免疫疾患、薬物動態、及び有機合成化学分野【動機増】関西学研都市近鉄奈良駅より車10分 大社日応談、日本語・安語必須、詳細は下記までお問い合わせ下さい。 【同合せ制 大阪市淀川区宮原3-5-36 新大阪第2森ビルバイエル薬品(株)リクルーティング(3)係 〒532 TEL 06(398)1145 担当/野本 己料局ト号でいた男社の社員及び応募者は全て公平に扱われます。



バイエル薬品株式会社

## THE EDWARD

## JENNER INSTITUTE

FOR VACCINE RESEARCH

The Institute is an entirely new development funded by Glaxo-Wellcome, MRC, BBSRC and the Department of Health. It will be located alongside the Institute for Animal Health, at Compton, Berkshire, have a core staff of 30 scientists and technologists and a total annual operating budget of about £4 million. The aims of the Institute are to improve understanding of the role of protective immune responses in different diseases, to develop better predictive models to study vaccine candidates for human diseases and to provide new insights into vaccine formulation and adjuvants.

The Head of the Institute is Professor Peter Beverley.

## GROUP LEADERS

The Institute is seeking to recruit outstanding and innovative scientists as Research Group Leaders. Scientists with experience in immunology, bacteriology, virology, molecular biology and protein structure and expression are invited to apply. Group leaders will be appointed for 5 years in the first instance and will be expected to develop a research programme in accordance with the aims of the Institute and will have first class research facilities and support.

## **ADMINISTRATOR**

The Institute also wishes to recruit an administrator. The successful candidate will play a key role in the development of the Institute including management of the laboratories, installation of equipment, hiring of staff and development of effective liaison with the Institute for Animal Health. Previous experience in laboratory or scientific management would be an advantage. The salary for this post will be dependent on experience and qualifications and will be up to £35,000 for an exceptional candidate.

Those interested in these posts may make informal enquiries and obtain further particulars from Professor Peter Beverley on 0171 380 9326 or fax: 0171 436 2956.

Applicants should include a CV, names of three referees and, in the case of Research Group Leaders, a brief statement of research interests and their relevance to the work of the Institute. Send applications to Professor P C L Beverley, ICRF Tumour Immunology Unit, 91 Riding House Street, London W1P 8BT. The Institute is an equal opportunity employer.

## **LECTURERS**

## Department of Ecology & Evolutionary Biology

Appointees will establish research programs, apply for external research grants, supervise honours and postgraduate students and contribute to undergraduate lectures, practicals and field excursions. A PhD, undergraduate teaching experience and a good record of scientific publications are essential. Appointments for 5 years on the Clayton campus, commencing January 1996.

## Lecturer in Vertebrate Ecology (Ref.No. 95A105)

The aim of this position is to strengthen the Department's research and testing in vertebrates, preferably in the fields of ecology and conservation biology. Duties will include lecturing in vertebrate biology to large first year classes. Appointment will be made at a level appropriate to the successful applicant's's qualifications and experience and in accordance with academic award classification standards for each level.

Salary Range: \$A42,198 - \$A50,111 p.a. (Lecturer Level B), \$A51,692 - \$A59,605 p.a. (Senior Lecturer Level C).

## Lecturer in Evolution (Ref. No. 95A104)

The aim of this position is to strengthen the Department's research and teaching focus on micro-evolutionary processes in plants and/or animals. Duties will include lecturing in evolution and systematics at second year level. The ability to contribute to teaching in plant biology would be an advantage.

Salary Range: \$A42,198 - \$A50,111 p.a. (Lecturer Level B).

Enquiries and applications, including relevant reference number, qualifications, experience and 3 referees to Professor M.N. Clayton, Department of Ecology and Evolutionary Biology, Monash University, Clayton, Victoria 3168, Australia. Tel. +61 3 9905 5650, Fax. +61 3 9905 5613, Email:margaret.clayton@sci.monash.edu.auby 2/10/95.



## NATIONAL UNIVERSITY OF SINGAPORE

## LEE KUAN YEW POSTDOCTORAL FELLOWSHIP



Founded 1905

Applications are invited for the <u>Lee Kuan Yew Postdoctoral Fellowship</u> from candidates with excellent academic records and proven research ability, and who had obtained their PhD degrees in the last few years.

The Fellowship will be tenable for 3 years in the first instance, with possible extension for 2 further years. It will be held concurrently with the candidate's appointment as a research staff member in one of the following Faculties/Institutes:

Faculty of Engineering
Faculty of Medicine
Faculty of Science
Institute of Systems Science
Institute of Molecular Agrobiology
Institute of Molecular and Cell Biology
Institute of Microelectronics

Under the Fellowship, a tax-free stipend of US \$1,500 per month will be provided. This will be in addition to the following terms of appointment normally provided to a research staff member:

- Gross annual salary ranges from \$\$50,600 to \$\$72,500. (The commencing salary will depend on the appointee's qualifications and experience.) In addition, a 13th month allowance and an Annual Variable Component may be payable under the flexible wage system applicable to staff on normal contracts.
- Leave and medical benefits will be provided. Depending on the type of contract offered, other benefits may include: provident fund benefits or an end-of-contract gratuity, a settling-in allowance, subsidised housing or a housing allowance, education allowance for up to three children subject to a maximum of S\$16,425 per annum per child, passage assistance and baggage allowance for the transportation of personal effects to Singapore.

(US\$1.00 = S\$1.39 approximately)

All academic staff will be given a networked personal computer (Pentium or Macintosh Power PC) with access to a Cray supercomputer, UNIX hosts, departmental laser printers, a wide spectrum of software, on-line library catalogue, CD-ROM databases, Teleview, Intv and Internet.

Applicants for the Fellowship should send their curriculum vitae and list of publications to:

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

or Telefax: (65) 778 3948

Closing Date: 30 September 1995



## STAFF SCIENTIST/SENIOR SCIENTIST

The Boston Biomedical Research Institute invites applications from candidates with interests in cellular, molecular and structural biological aspects of non-muscle cell motility, molecular motors and the cytoskeleton. Generous start-up funds and excellent facilities will be available to the successful candidate. The Boston Biomedical Research Institute is an independent biomedical research center that offers an exceptionally collegial and intellectually stimulating environment. Applicants should submit a curriculum vitae, a description of research interests, and names of three references to: Ms. Barbara Zillman, Secretary, Search Committee, Boston Biomedical Research Institute, 20 Staniford Street, Boston, MA 02114. Boston Biomedical Research Institute is an Equal Opportunity Employer.

Rubber Compound CHEMIST to perform all rubber compound formulation including the creation of new rec ipes and modification of existing recipes for automobile and motorcycle products development. Will develop molded, coextruded, and rubber-to-metal bonded parts to meet customer specifications. Will ensure quality and testing of rubber material and will develop all quality control standards for customers by using ASTM (American Society for Testing and Materials) standard and IIS can Society for Testing and Materials) standard and JIS (Japanese Industry Standard). Will assist in training of production rubber mix operators and rubber engineering technicians. Requirements: M.S. in Chemistry. Experience: one year in the job offered or one year as a Chemist in rubber industry for automobiles and motorcycles which includes working on interior and exterior sealing products. Compounding with commercial rubber including EPDM (ethylene-propylene-diene), ACM (polyacry-late), CSM (hypalon), FPM (fluorocarbon), SIS (styreneisoprene-styrene) and Silicone. Application of double face tape and primer on rubber parts. Testing of rubber material and calibration of test instruments. Must have worked with Japanese Industry Standard JIS K 6301, JIS K 6380, and JIS Z 1528. 40 hours per week, 8:00 a.m. to 5:00 p.m., \$42,000 per year. Send résumés and proof of requirements in duplicate (no calls) to: T. Do, Ref No. 1204, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216. Those who are not authorized to work permanently in the U.S. need not apply.

### SUPERVISORY RESEARCH MICROBIOLOGIST

The Division of AIDS, STD and TB Laboratory Research, National Center for Infectious Diseases, Centers for Disease Control and Prevention invites applications for the position of **CHIEF**, Tuberculosis/Mycobacteriology Branch. This branch is responsible for providing laboratory support for epidemic investigations and special studies of tuberculosis and other mycobacterial diseases; conducting research into the immunology of mycobacterial infections, pathogenic mechanisms, and molecular basis of disease; providing reference diagnostic services to state public health laboratories; and developing, evaluating, and/or improving methods for classifying and identifying mycobacteria and mycobacterial disease. Basic re-quirements include a degree in microbiology, biology, chemistry, or basic medical science. An advanced degree in microbiology and experience as a principal investigator in bacterial immunology, genetics, and molecular biology is desirable. Civil Service salary range for the position is \$57,760 to \$88,326 per annum. Salary and benefits are commensurate with education and experience. Interested individuals are invited to send a curriculum vitae with Publications to: Ms. Janie Oddy, CDC-HRMO, 1600 Clifton Road N.E., Mailstop K15, Atlanta, GA 30333. CDC is an Equal Opportunity Employer and has a smoke-free environment. Candidates must be U.S. citizens since this is a career position.

## BIOINFORMATICS

System administrator and developer sought to manage established bioinformatics server (flybase bio.indiana.edu) for *Drosophila* genome project. Unix experience and programming skills are needed. Start December 1995, salary \$32,000 to \$38,000. Send résumé and references with cover letter to: **Don Gilbert, Biology De** partment, Indiana University, Bloomington, IN 47405; Email: gilbertd@bio.indiana.edu.

### **POSITIONS OPEN**

## SENIOR PHARMACOLOGIST

Research firm in Central Ohio. Research, development and application of Fractionation Separation Technology Primary responsibility is leadership, management of FST for pharmaceutical and cosmetic industries. Must also assist chief scientist with application of FST in biotechnology areas, including environmental restoration and agricultural. Ph.D. in pharmacy. Pharmaceutical science as major field of study. No experience required. Ability to read, write and speak Russian a special requirement. 40 hours per week Monday to Friday, 9 a.m. to 6 p.m. \$45,000 per year. Send two resumes and cover letters (no calls) to: J. Davies, REF#1089, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus,

## **ANNOUNCEMENTS**

## SDE/GWIS FELLOWSHIPS-1995-96

Graduate women in science announces several **FEL-LOWSHIPS** for women scientists (\$1,500 to \$3,000). These are the Eloise Gerry in the biological and chemical sciences and the Sigma Delta Epsilon in the natural sciences beginning April. Members are also eligible for the Vessa Notchev fellowship. Applications are due December 1, 1995. Write to: P.O. Box 19947, San Diego, CA 92159 and send a self-addressed business envelope with stamp (55¢). For \$500 Eli Lilly Travel Awards (fall and spring) contact Elizabeth Lund at: lundX003@maroon. tc.umn.edu or Telephone: 612-624-6288.

### **SYMPOSIUM**

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 ty of Washington; J. W. Larrick, PAIMM. Abstracts due August 31, 1995. Sponsor: Palo Alto Institute of Mo-lecular Medicine, 2462 Wyandotte Street, Mountain View, CA 94043. Telephone: 415-694-4996; FAX: 415-694-7717; Email: PAIMM@AOL.COM.

## ETHICAL ISSUES IN RESEARCH RELATIONSHIPS BETWEEN UNIVERSITIES AND INDUSTRY

Sponsored by University of Maryland at Baltimore Center for Biomedical Ethics Friday and Saturday, November 3 and 4, 1995 Baltimore Marriott Inner Harbor Hotel
For information, contact: Dr. James Rule, University
of Maryland, Room 3-E-10, 666 West Baltimore
Street, Baltimore, MD 21201. Telephone: 410-7067960; FAX: 410-706-3028.

## **MEETINGS**

The Johns Hopkins Protein Folding Meeting will be held 16–19 March 1996 at the Coolfont Center, Berkeley Springs, WV, two hours drive from Dulles-Washing-

ton DC Airport, ground transportation available.
Session Topics/Chairs: Experimental Detection of Folding Intermediates/Sebastian Doniach and Keith Hodgson; Prediction Methods/David Eisenberg and Shoshana Wodak; The Folding Reaction/Robert Balding and The State of the Programme Company of the Pr win and Lila Gierasch; Thermodynamics/Ernesto Freire and Peter Privalov; Open discussion of selected topics/Walter Englander and Neville Kallenbach; Christian Anfinsen Memorial Lecture/Ken Dill; Poster Session/Chair TBA. Places are limited. Request applica-Session Chair 18A. Flaces are limited. Request applica-tion from: Sandra Taylor, 102 Macaulay Hall, Johns Hopkins University, 3400 North Charles Street, Bal-timore, MD 21218 or by Email from (protein@linus. che.jhu.edu). Organizers for 1996 are E. E. Lattman and G. Rose.

## **COMPUTER MARKETPLACE**

The Software Solution To Managing Bibliographic References

phone (313) 996-1580 ext. 90 fax (313) 996-4672 email: sales@pbsinc.com URL: http://argus-inc.com/pbs/pbs.html

\*Circle No. 7 on Readers' Service Card



\*Circle No. 59 on Readers' Service Card

- Low Cost High Quality Digital Scans Scan Directly to Pro Photo CD 35MM, 120MM & 4x5 Negatives, Sildes, Transparencies - Color or Black & White Cost Effective Means of Archiving and
- Retrieving Large Numbers of Images ALLIED PHOTOCOLOR 314-652-4000

### Circle No. 18 on Readers' Service Card

### STATISTICAL SOFTWARE

STATISTICAL SOFTWARE

Announcing NCSS 6.0 for Windows: an accurate, easy to learn, statistical system. Includes t-tests, Anova, chi-square, survival analysis, regression analysis, multivariate analysis, graphics. Data may be imported from over 30 database and spreadsheef formats. Output may be read by your Windows word processor. Thousands of users. \$395. Ask for Dr. Hintze (PhD Statistician) at (800) 898-6109, fax (801) 546-3907. E-mail address: ncss@ix.netcom.com. Web page: WWW.ICW. COM NCSS.

\*Circle No. 41 on Readers' Service Card

## Oligonucleotide Design Software **☆ HYBsimulator**<sup>TM</sup> **☆**

Using the nearest neighbor model, HYBsimulator will simulate the hybridization of a large group of oligonucleotides with a large database (GenBank) (Computer Hybridization Simulation) to design optimal oligonucleotides with insight into the biological system. Imagine the possibilities...

**AGCT** (800) 494-AGCT (714) 833-9983

\*Circle No. 21 on Readers' Service Card

## GeneJockey II

for Apple Mac

Manipulates and analyzes nucleic acid sequences. Finds PCR Primers. Searches GenBank. Built-in fast analyzer for AB Sequencer files. Accelerated for PowerPC. \$1000

**BEAUTIFUL USER INTERFACE!** Call BIOSOFT on (314) 524-8029 for FREE DEMO DISK

In Europe: +44 (0)1223 368622

\*Circle No. 56 on Readers' Service Card

Marketplace ads continue on page 1482

## MARKETPLACE



Circle No. 12 on Readers' Service Card



Circle No. 36 on Readers' Service Card

## Custom Purity >70%, \$20 Res. (offer thro. May) 1st order disc., no setup fee, free HPLC/A.A. analy PEPTIDE ANTIBODY: \$250 Rabbit

UNBEATABLY: NO CHARGE IF NO ANTIBODY PRODUCTION TABLY: NO CHARGE IF NO ARTHUD PEPTIDE LIBRARY: from \$150/library 1-800-400-0070 (Tel) TANA LAB., LC. 1-800-400-0070 (16)

Circle No. 14 on Readers' Service Card

Activated For Protein Modification

Shearwater Polymers, Inc.

(800) 457-1806 (205) 533-4805 (fax)

Circle No. 1 on Readers' Service Card

antibody for phosphotyrosine detection is TRANSDUCTION LABORATORIES available from LABORATORIES 1-800-227-4063 the laboratory where it the low price of

Circle No. 22 on Readers' Service Card

\*See our listing in the Science Electronic Marketplace http://www.aaas.org

## MARKETPLACE

## **SCIENCE LOGO T-SHIRTS** BUY 2 & GET 10% OFF!

Blue type on grey 100% cotton shirt. For details or an order form, call Corrine Harris at (202) 326-6527, Science or fax (202) 682-0816.

No frills, Just good DNA at very low prices

\$1.60 per base

· No set-up fee · 48 hour turnaround • 50 nanomole synthesis

1-800-359-5794 email onlydna@wln.com

Circle No. 10 on Readers' Service Card



for research

## PRŒEN

1st specific monoclonal antibody for cell cycle studies and immunohistochemistry 39 kDa low density lipoprotein receptor-associated protein

LRP

515 kDa low density lipoprotein receptor (α2-MR)-related protein (CD91)

LRP

85 kDa low density lipoprotein receptor-related protein

PROGEN Biotechnik GmbH 

Im Neuenheimer Feld 519 

Heidelberg
Tel. (+49) 6221 4035-0 

Fax (+49) 6221 403535

\*Circle No. 67 on Readers' Service Card

## **Human Microvascular Cells** Complete Cell System

NOW ONLY \$350

NEW DEFINED ANIMAL ENDOTHELIAL CELL SYSTEMS: Porcine Aortic Endothelial Cell System Bovine Aortic Endothelial Cell System

800-697-1211

cellsustems

\*Circle No. 40 on Readers' Service Card

## CUSTOM

**SYNTHESIS** 

## PURE & SIMPLE

- Superb Technical Support
- Impeccable Quality

19\* per base \$10 setup 50 nmole

World's Fastest Service

 Cap Gel & TOF Mass Spec \* Some restrictions apply. Please call for details

## MIDLAND DISPUTED #1 CUSTOM DNA SYNTHESIS SERVICE

STILL THE UN

THE MIDLAND CERTIFIED REAGENT COMPANY Phone 1-800-247-8766 FAX 915-694-2387 email mcrc@oligos.com

Circle No. 2 on Readers' Service Card

The Peptide Engineering Specialist Peptido Genic

Peptide: \$20/residue/crude/5days

IonSpray MS Service : MS (\$30), LC/MS (\$250)

Circle No. 19 on Readers' Service Card

### MARKETPLACE

World leader in Synthetic DNA and Peptides

E-Mail: Biosyn@aol.com

NO SETUP CHARGE

- 19\* 150 nmole (10 ODU) base • Synthesis Report
  - 24 hour SHIPPING

Visit our Home Page on the Internet (WWW) http://www/biosyn.com

! FREE MASS SPEC!

NO SETUP charge • Free HPLC Tracing

• 15 - 40 mgs

residue • 8 - 30 residues

Shipped in 5 days

! Antipeptide Antibodies production services, & more! Since 1984, serving you with quality products

## BIO-SYNTHESIS

Tel: 800-227-0627 Fax: 214-420-0442

Circle No. 23 on Readers' Service Card

## **OUALITY CUVETTES!!!**

**Inexpensive Electroporation Cuvettes** Each sterile package includes a free pipette for easy sample removal!

1-800-289-2465 FAX: 619-597-9594

\*Circle No. 39 on Readers' Service Card



Circle No. 20 on Readers' Service Card

## SCIENTIST

Fits Equations To Data

- nonlinear algebraic equations
  implicit algebraic equations
  Laplace transforms
  ordinary differential equations
  various splines/polynomials

1-800-942-6284  ${f MicroMath}$ 

Circle No. 38 on Readers' Service Card

## Custom DNA Purified & Delivered in 48 hours

\$5.00 per base • Purified Guaranteed minimum 100µg

Research Genetics, Inc. 1-800-533-4363

Circle No. 3 on Readers' Service Card

## ...WHY MIDLAND DNA?

One Fewer Unknown.

1. Custom DNA specialists with a twelve year track record of service and product quality.

Custom Oligonucleotide Synthesis, DNA and RNA Sequencing Primers shipped in 6 hours\* Gene Construction and Sequence Verification DNA and RNA Polynucleotides Primers • Linkers • Enzymes Molecular Biology Services

2. Record-time response to individual customer requests and needs.

Toll-free Technical Support Overnight Delivery FAX, Phone and Internet Ordering Custom Packaging and Labeling

3. Exhaustive quality control standards.

Reagent Consumption Monitoring Trityl Absorbance Measurement Capillary Gel Electrophoresis\* MW verified by TOF Mass Spectrometry\*

4. Fair Price Policy.

\$ for \$ and Orange for Orange, your best value Every oligonucleotide individually quality-controlled

5. At your service 24 hours a day on The World Wide Web.

http://www.mcrc.com Current Prices for all Services List of some 100 Modifications including Biotin, Amino, Fluorescein and S-oligos NEW List of Competitors with 800 numbers - Check this out!

Optional service available. Call us for pricing.

Call, FAX or e-mail Midland for our new catalog. Better yet, visit our site on the web at http://www.mcrc.com Tell us your thoughts at 800-247-8766 or e-mail to comments@oligos.com

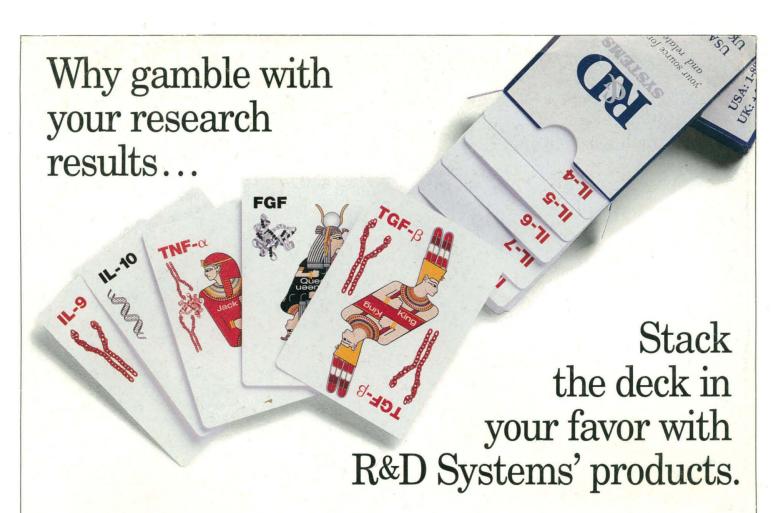
## MIDLAND

One Fewer Unknown.

The Midland Certified Reagent Company 3112-A West Cuthbert Avenue Midland, TX 79701

1-800-247-8766 • FAX 1-915-694-2387 • E-mail info@oligos.com

Circle No. 47 on Readers' Service Card



R&D Systems offers over 500 reagents for cytokine and cytokine-related research.

## Cytokines and soluble cytokine receptors

- recombinant human
- recombinant murine
- natural

## **Antibodies**

(monoclonal and polyclonal) to:

- cytokines
- soluble cytokine receptors
- adhesion molecules

## **Immunoassays**

- Quantikine<sup>™</sup> for the measurement of cytokines and soluble cytokine receptors
- Quantikine HS for the measurement of extremely low concentrations of cytokines
- Quantikine IVD™ for in vitro diagnostic use
- Parameter™ for the measurement of soluble adhesion molecules



## Fluorokine™ flow cytometry reagents

for the analysis of functional cytokine receptors on cell surfaces



## T cell Columns

for the enrichment and separation of human and mouse T cell and T cell subsets

## FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES.

U.S.A. and Canada R&D Systems, Inc.

614 McKinley Place NE Minneapolis, MN 55413, USA. Tel: 612 379-2956 Fax: 612 379-6580

International Distributors

Europe R&D Systems Europe Ltd. 4-10 The Quadrant, Barton Lane Abingdon, OX14 3YS, UK. Tel: +44 (0)1235 531074 Fax: +44 (0)1235 533420

Japan Funakoshi Co., Ltd. 9-7, Hongo 2-Chome Bunkyo-ku, Tokyo 113, Japan Tel: +81 (03) 56841622 Fax: +81 (03) 56841633

International Freefone Numbers Belgique/België: 078 11 04 68. Danmark: 80 01 85 92. France: 05 90 72 49. Nederland: 060-225607. Norge: 800 1103. Sverige: 02079 31 49.



1-800-343-7475

Argentina: (54) 54-1-942-3654. Austria: (43) 02 292 35 27. China: (886) 2-368-3600. Colombia: (1) 305-389-7085. Germany: (49) 060 32-994-00. Hong Kong: (852) 649-9988. Israel: (972) 02 9230048. Italy: (39) 02 35 75 3777. Korea: (850) 82-2-569-0781. Mexico: (52) 5-652-3784. Spain & Portugal: (34) 01 448 84 86 or 03 456 97 06. Switzerland: (41) 061 481 2828. Venezuela: (58) 2-237-0780.