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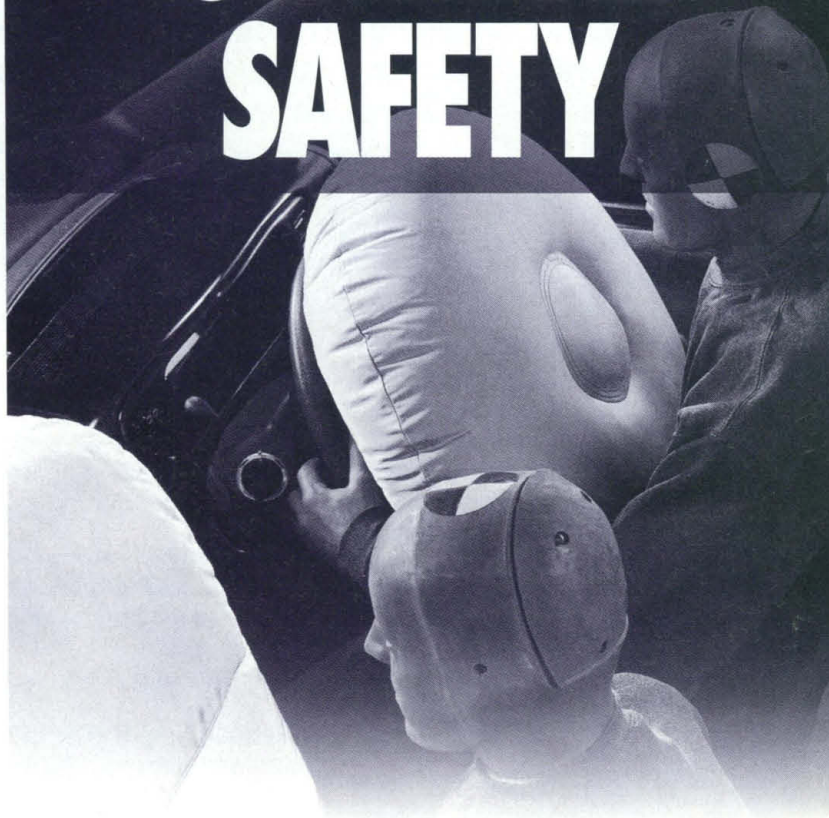


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J. Zimmerman *et al.* (1994)
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N. Papadopoulos *et al.* (1994) *Science* 263:1625.

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E.R. Mardis (1994) *Nucleic Acids Research* 22:2173.

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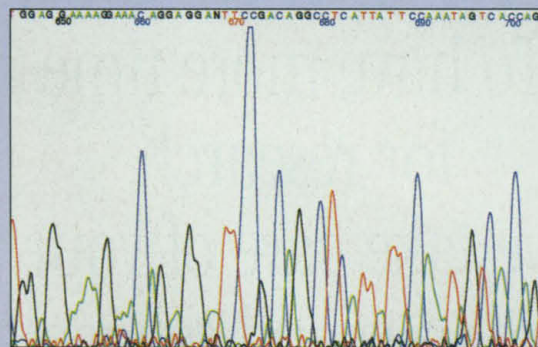
F.S. Leach *et al.* (1993) *Cell* 75:1215.

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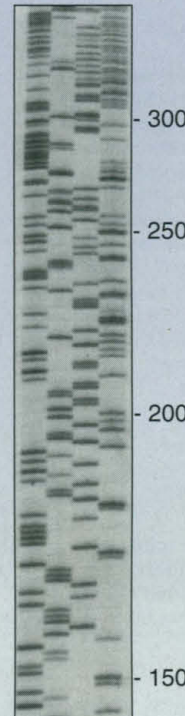
B. Liu *et al.* (1995) *Nature Genetics* 9:48.

"Manual sequencing was accomplished using dideoxynucleotide cycle sequencing (SequiTherm, Epicentre)..."

R. A. Philibert *et al.* (1995) *Analytical Biochemistry* 225:372.



C. elegans M13 subclone sequenced using the SequiTherm Long-Read™ Kit and an ABI Model 373A "Stretch" Sequencer. Trace data show excellent peak resolution 700 bases from the primer. (Results courtesy of L.A. Weinstock & E.R. Mardis, Wash. Univ. Genome Sequencing Center)

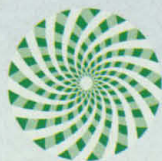


M13mp18 plasmid was sequenced using the SequiTherm Long-Read Kit and LI-COR® Model 4000L Sequencer; reads of 800 bases or greater at >99% accuracy are possible. (Results courtesy of S.L. Sutter, LI-COR, Inc.)

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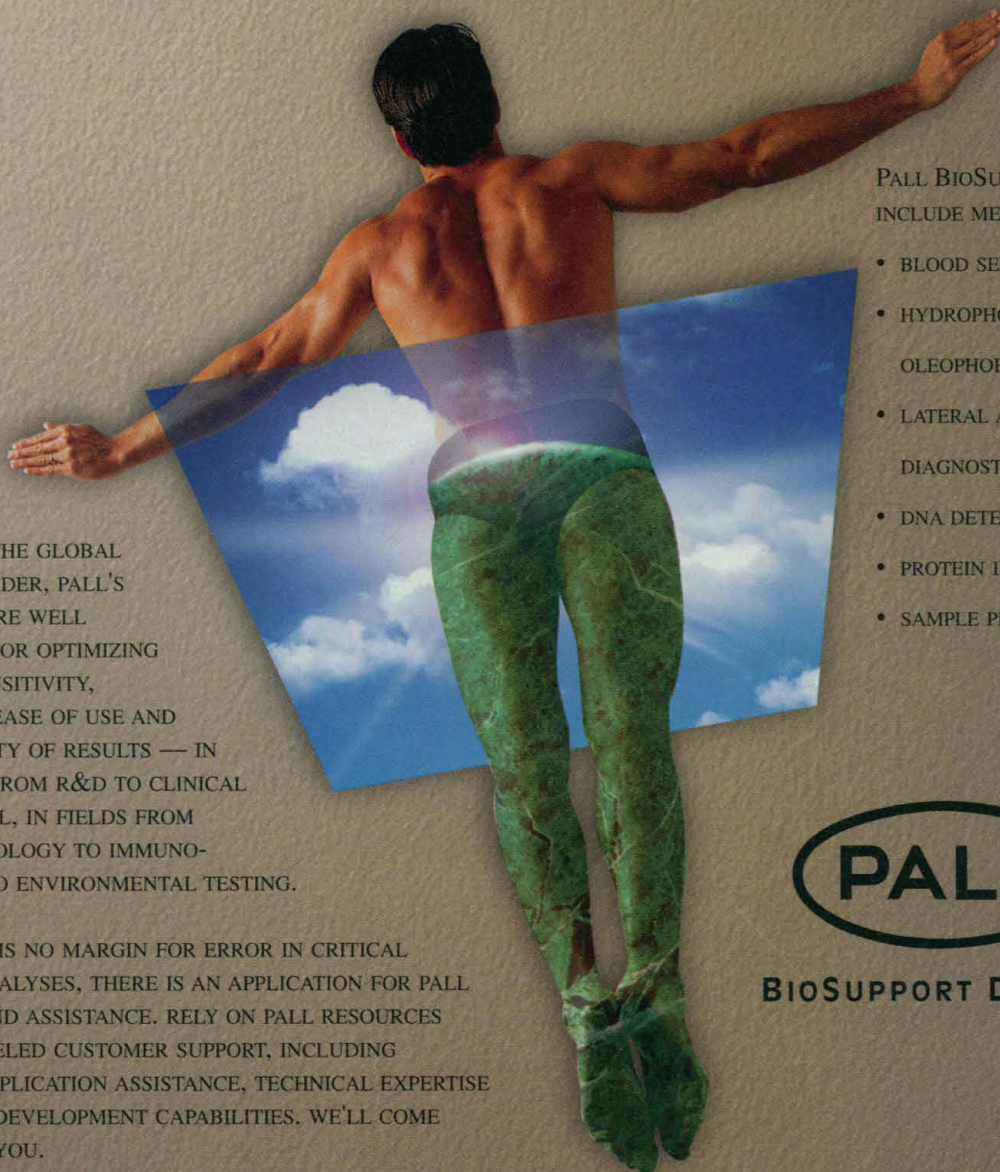
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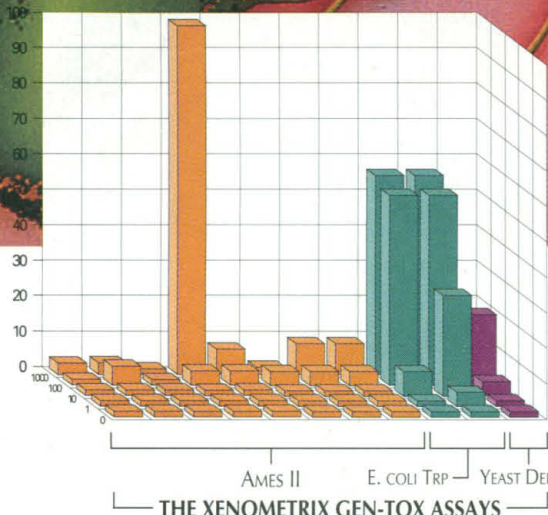
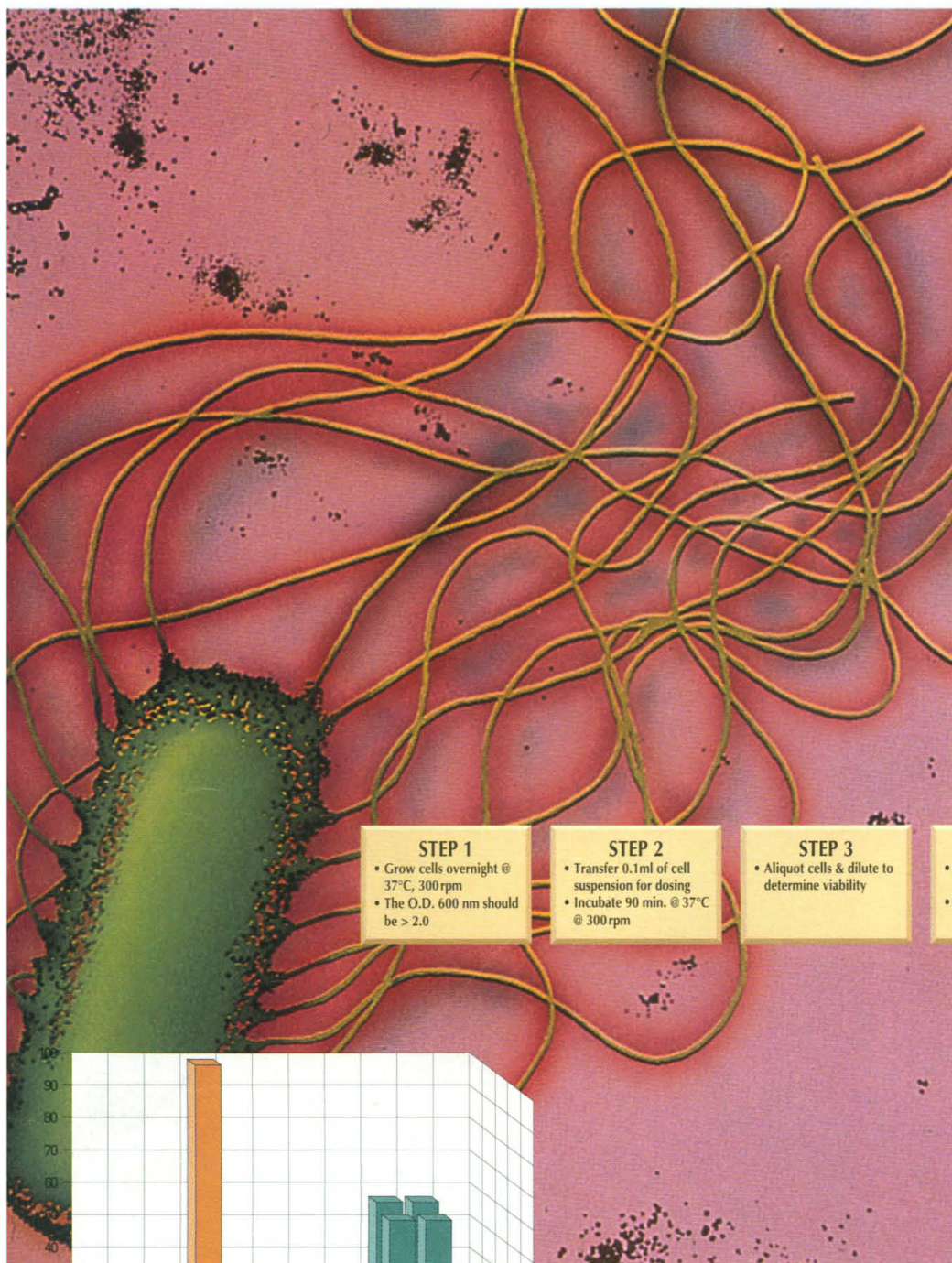
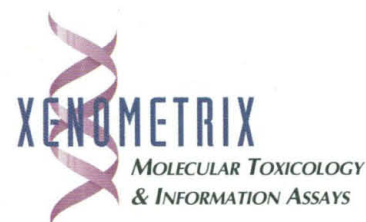
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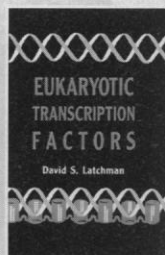
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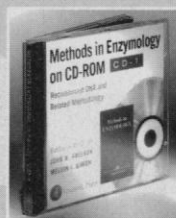
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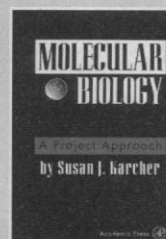
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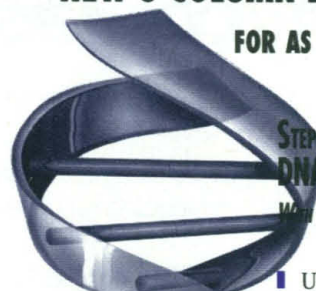
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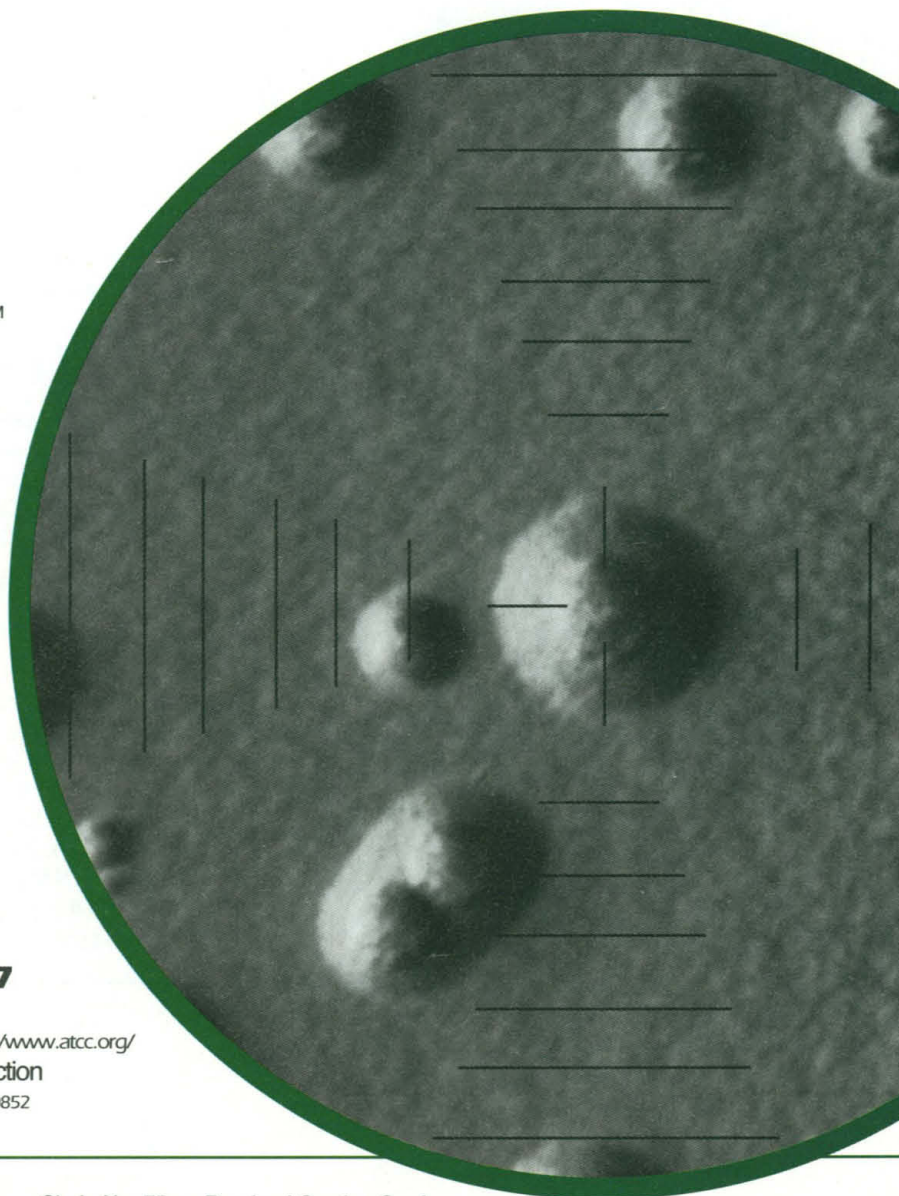
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Fax: **1-301-816-4361**

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American Type Culture Collection

12301 Parklawn Drive, Rockville, MD 20852



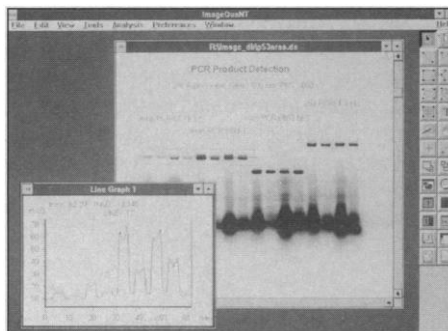
PRODUCTS & MATERIALS

Nonisotopic RNA Detection

A sensitive mRNA detection system consists of the BrightStar BIOTINscript Transcription Kit and the BrightStar BioDetect Kit, which can be used with either ribonuclease protection assays, Northern (RNA) analysis, or Southern (DNA) analysis. The system's improved blocking and washing buffers, chemiluminescent reagent, and high quality nylon membrane provide extremely low background and maximize the signal-to-noise ratio. **Ambion. Circle 136.**

Oligonucleotide Labeling Kit

The Vistra Fluorescence 5' Oligolabelling Kit is designed for polymerase chain reaction labeling and gel shift assays. The kit's novel chemistry attaches a single fluorescein dye molecule to the 5' end of any oligonucleotide quickly and easily. Designed for use with the



FluorImager SI, the assays require no film exposures or darkroom processing. **Vistra Systems. Circle 137.**

Genomic DNA and Viral Nucleic Acid Kits

The QIAamp Blood Kit and QIAamp Tissue Kit rapidly and efficiently purify DNA di-

rectly from whole blood and other clinical samples for reliable polymerase chain reaction (PCR) amplification, digestion, or blotting. In just 20 min, the DNA is free of hemoglobin and other contaminants, ready for direct addition to amplification reactions. The simple spin-column procedure requires no cell separation, organic extraction, or alcohol precipitation. The Blood Kit purifies DNA directly from whole blood, plasma, body fluids, cultured cells, and paraffin sections. The HCV Kit purifies viral RNA from plasma, serum, and other cell-free body fluids for reliable reverse transcriptase PCR in less than 30 min. The Tissue Kit can be used on both hard and soft tissues without homogenization. **Qiagen. Circle 138.**

DNA from Plant Leaf Tissue

The Plant DNA Isolation Kit eliminates the need for hazardous organic reagents and produces DNA that can be used for polymerase chain reaction, restriction digests, or Southern blots. The kit can process from 4 mg to 1 g of tissue in each sample. The grinding spheres require less time and effort than the standard mortar and pestle grinding method, making it possible to process multiple samples simultaneously. **Boehringer-Mannheim. Circle 139.**

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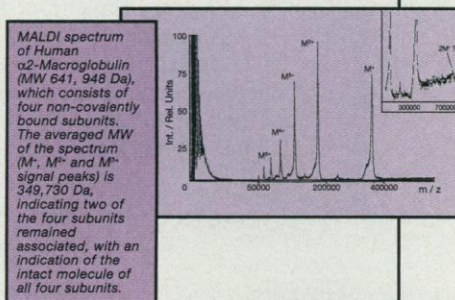
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Opinion

High accuracy mass determination of large proteins

Accurate determination of the molecular weight of large biomolecules has traditionally been difficult or impossible. Now, the VISION 2000 MALDI instrument operating in reflectron mode provides a dramatic increase in sensitivity and accuracy of molecular weight determination for biomolecules up to and beyond 500 kDa.

SDS-PAGE and GPC, both comparative techniques, are widely used for molecular weight determination but show very poor accuracy with errors typically in the 10-15% range and in some circumstances significantly worse.



MALDI (Matrix Assisted Laser Desorption Ionization) is the only technique that allows the direct analysis of molecules with masses exceeding 200 kDa. Ions above 500 kDa have been successfully measured, demonstrating the unrivalled mass range of the technique. The unique ion optics of the VISION 2000 provides low pmol sensitivity with accuracy in the 0.1% range even in the presence of salts and buffers normally found in these samples.

The unique high resolution reflectron and detection systems of the VISION 2000 deliver superior accuracy and sensitivity at high mass. A choice of operating modes - linear, reflector and PSD (Post Source Decay) - and powerful interpretation software provide the flexibility to meet the demands of all biochemical and polymer research applications.



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USA: (+1)408/433 4800, Fax: 433 4823
Japan: (+81)03/3373 3001, Fax: 3372 7051

This OPINION column features technical tips & preliminary information relating to instruments designed and built by Thermo BioAnalysis Ltd., Hemel Hempstead, U.K.

Monoclonal Antibodies

Monoclonal antibody (mAb) G3-245 reacts specifically with human retinoblastoma protein in formalin-fixed, paraffin-embedded or frozen tissue sections. The protein plays an integral role in cell cycle regulation. **Bio-Genex. Circle 140.**

A mAb is available to the recently described human activated lymphocyte cellular adhesion molecule. **Antigenix America. Circle 141.**

A mAb is available to the bcl-2 protein, an intracellular membrane protein found primarily in the nuclear envelope, endoplasmic reticulum, and outer mitochondrial membrane that is associated with apoptosis. **Diagnostic BioSystems. Circle 142.**

Fluorescent DNA Sequencing Enzyme

New DNA sequencing kits are based on AmpliTaq DNA Polymerase, FS (Fluorescent Sequencing), a new enzyme that reduces time and costs and increases power and precision. The enzyme has the potential to increase the speed of large-scale genome and complimentary DNA sequencing projects by a factor of 4. It reduces by half the amount of work needed for stringent comparative DNA sequencing to identify mutations and polymorphisms. The enzyme is a recombinant form of Taq DNA polymerase that has been genetically engineered to improve sequencing performance and is designed for use with Perkin-Elmer's Dye Primer Kits and Dye Terminator Kits. **Perkin-Elmer. Circle 143.**

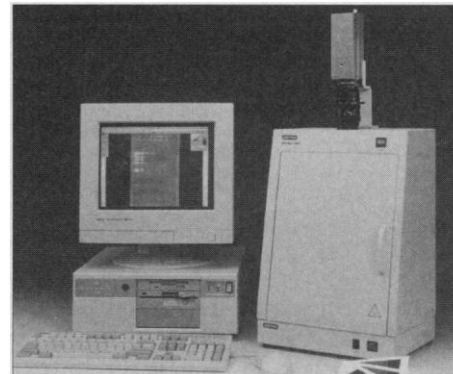
Mycoplasma Detection Kit

The polymerase chain reaction-based Mycoplasma Detection Kit offers high sensitivity and specificity for screening cell cultures for the presence of mycoplasma. The kit features a set of mixed amplification primers to detect eight commonly encountered mycoplasma contaminants. **American Type Culture Collection. Circle 144.**

Gel Documentation

The Gel Doc 1000 system provides molecular biologists rapid documentation of ethidium bromide and other fluorescently stained gels without the need for a darkroom or expensive film. The images can be optimized for brightness and contrast and manipulated

on the user's Macintosh or Windows system for production of publication quality images (saved as eight-bit TIFF files), with



archiving on the user's hard drive. There is no need to take trial and error shots with Polaroid film—Gel Doc can work with any Macintosh- or Windows-compatible printer. The system consists of a combined trans-illuminator and fluorescent darkroom with a high-resolution charge-coupled device camera and Windows, Macintosh, or Power Macintosh software. The unit measures just 34 cm by 24 cm by 63 cm. **Bio-Rad Laboratories. Circle 145.**

Literature

Growth Factors and Cytokines describes a line of these products. **Sigma Biosciences. Circle 146.**

Software for Science focuses on the information revolution in chemistry. Volume 29 includes 100 new chemistry tools in addition to the 1850 products listed in the previous volume. The scientific, engineering, and technical software can be used on DOS, Windows, Macintosh, and UNIX workstations. **SciTech. Circle 147.**

Electronic Imaging and Analysis Systems features a full range of video imaging products for molecular biology research. **Fotodyne. Circle 148.**

AMRESCO 1995-1996 offers more than 600 high purity products for biotechnology, including nucleic acid purification kits and high resolution-polyacrylamide matrices. **AMRESCO. Circle 149.**

Fluormax-2: World's Most Sensitive Photon Counting Spectrofluorometer is a brochure on this instrument. **ISA Jobin Yvon/SPEX. Circle 150.**

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.

TIGR HCD A New Resource for Genomics Research.

The Institute for Genomic Research is making its Human cDNA Database (TIGR HCD) of more than 345,000 complementary DNA (cDNA) sequences (and certain associated clones)

available to scientists conducting basic research at non-profit institutions. These data were the basis for the paper, "Initial assessment of human gene diversity and expression patterns based upon 83 million nucleotides of cDNA sequence,"¹ published in *Nature* on September 28, 1995.

TIGR HCD is a curated relational database of cDNA fragments and assemblies, including tissue-specific expression data and (where possible) positive or tentative gene identifications.

The Institute for Genomic Research created the HCD — with scientific and financial support from Human Genome Sciences (HGS) and SmithKline Beecham (SB) — to offer researchers Internet access (via e-mail and the World Wide Web) to sequence and related data generated by privately financed studies carried out at TIGR and HGS².

Access •There is no charge for access to the TIGR Human cDNA Database. •Clones for TIGR sequences are available from the American Type Culture Collection at a nominal charge. •TIGR HCD is open to employees

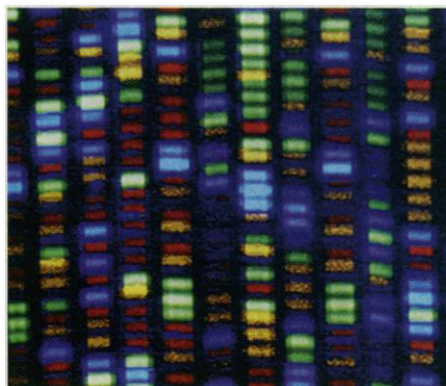
of non-profit or governmental organizations. •There are no restrictions on access to some 300,000 EST sequences substantially identical to whole or partial gene sequences already published. •An additional

45,000 unpublished ESTs and assemblies (and associated clones) are available under terms that reflect provisions common in academic and industrial material transfer agreements.

Queries: TIGR HCD users can search the database by protein or gene name (putative identification), by nucleotide or peptide sequence, or by TIGR accession number (as listed in reference 1). Results can range from a list of entries with specified similarity to full sequences of matching entries.

Data: The data in HCD have been generated by the expressed sequence tag (EST) method, which provides rapid characterization of expressed genes by partial DNA sequencing³. HCD data include nucleotide sequences, putative sequence identifications, and tissue-based expression information derived from a large-scale EST survey of human tissues. The data set includes 40,000 assemblies,

constructed by combining overlapping ESTs. And all nucleotide data are searched in six-frame translation — that is, the database searches all reading frames for both the sequence and its anti-sense strand.



For more information regarding TIGR HCD (including user application forms), or contact the TIGR Database Manager at:

e-mail: info@hcd.tigr.org
fax: (301) 838-0218
mail: Manager, TIGR Database
The Institute for Genomic Research
9712 Medical Center Drive
Rockville, MD 20850

world wide web: <http://www.tigr.org>(TIGR Database)

¹ Adams MD, et al. 1995. *Nature*, 377:250-330

² Of TIGR HCD's 345,000 expressed sequence tags, approximately 105,000 were generated at TIGR and 55,000 at HGS; the remainder derive from sources in the public domain.

³ Adams MD, et al. 1991. Complementary DNA sequencing: Expressed sequence tags and the Human Genome Project. *Science*, 252:1651-1656

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SCIENCE

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

POSITIONS OPEN

ENVIRONMENTAL MICROBIOLOGY MICROBIAL ECOLOGY

The Department of Microbiology at the University of Tennessee, Knoxville, invites applications for a tenure-track faculty appointment as **ASSISTANT PROFESSOR**. Candidates for the position should have a commitment to applying modern molecular techniques in the analysis of microbial populations and interactions in biogeochemical processes. The University community and the nearby facilities of Industry, Oak Ridge National Laboratory, National Park Service, and the Tennessee Valley Authority offer unique opportunities for collaborative investigations. Preference will be given to applicants with a willingness to become part of this interacting network. The successful applicant must hold a doctoral degree with at least two years of postdoctoral experience in modern molecularly based Environmental Microbiology and Microbial Ecology, demonstrated research productivity, and evidence of potential for excellence in teaching. Responsibilities include graduate and undergraduate teaching in Environmental Microbiology or Microbial Ecology, establishment of a productive, independent research program, and academic responsibilities normally associated with a tenure-track faculty position. The starting date is August 1996.

Applicants should submit a letter of interest accompanied by curriculum vitae, a description of research interests and career objectives, and the names, addresses and telephone numbers of three individuals who can evaluate the applicant's qualifications for the position. All material should be sent to: **Dr. Gary S. Saylor, Chair of Search Committee, Department of Microbiology, The University of Tennessee, Knoxville, TN 37996-0845. Telephone: 423-974-8080** for additional information. Nominations should be made as soon as possible: evaluation of applications will begin in January 1996. *The University of Tennessee is an Equal Employment Opportunity/Affirmative Action/Title IX/Section 504/ADA Employer. Applications from women and minorities are especially invited.*

ASSISTANT OR ASSOCIATE PROFESSOR Eucaryotic Molecular Genetics/Molecular Ecology

Applications are invited for a **TENURE-TRACK** appointment in an expanding life sciences program. Candidates with training in eucaryotic molecular genetics, molecular ecology or molecular aspects of cell biology, or molecular recognition are encouraged to apply. We are seeking individuals capable of applying molecular genetics or biochemical methods to basic biological issues of invertebrate or vertebrate animals or plants. Preference will be given to investigators which regardless of research expertise are willing to teach general ecology courses as well as to participate in advanced graduate level courses in subjects related to the areas of the candidates' expertise. Successful candidates must have demonstrated research potential through a minimum of several years of postdoctoral experience and recent publications, and are expected to maintain an independent, nationally recognized, research program supported through extramural funding, and to participate in Ph.D. training. Strong oral and written communication skills are essential. Applicants should send curriculum vitae and a statement of research goals, and arrange to have three letters of recommendation sent to: **Shari Howell, Search Committee E, School of Biological Sciences, University of Missouri-Kansas City, Kansas City, MO 64110.**

Screening of applicants will begin December 1, 1995, and continue until the position is filled. *University of Missouri-Kansas City is an Equal Opportunity/Affirmative Action Employer.*

ACADEMIC POSITION

ASSISTANT PROFESSOR. The Department of Chemistry and Biochemistry of The University of Texas at Austin solicits applications for a tenure-track assistant professorship beginning September 1, 1996. Exceptional candidates whose research training and interests are in areas of biochemistry and experimental physical chemistry are especially encouraged to apply. Review of applications will begin on November 1, 1995, and applications received after December 1, 1995, may not receive consideration. Candidates who have demonstrated outstanding research ability and show promise in teaching should forward a curriculum vitae, short descriptions of research plans, and three letters of reference to: **Search Committee, Department of Chemistry and Biochemistry, The University of Texas at Austin, Austin, TX 78712.** *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

BIOLOGY FACULTY POSITIONS San Diego State University

Two tenure-track appointments at **ASSISTANT PROFESSOR** level, but Associate level possible, in the Biology Department as early as fall 1996. Ph.D., active research program required and postdoctoral experience highly desirable.

1) **Evolutionary Biologist.** Must have expertise in recent and/or fossil reptiles/amphibians, addressing evolutionary, ecological, biogeographic, molecular, or functional problems within a phylogenetic context. Must interact with faculty in organismal biology, evolution, systematics. Teaching to include herpetology and vertebrate anatomy and periodic involvement in general courses, possibly human anatomy, ecology and evolution, or introductory biology.

2) **Quantitative Ecologist.** Must have expertise in application of advanced statistical methods in ecological research and experience in a field of ecology that will complement existing programs. Teaching to include participation in lower division course in biostatistics, and upper division/graduate courses in advanced statistics, sampling design, ecological modeling, or other courses relating to ecological specialty. Should have good communication skills and strong interest in collaborating with ecology colleagues and working with graduate students. Evidence of research productivity is essential. More information on both positions available on internet at <http://www.sci.sdsu.edu/fac-recruitment>. Closing date for receipt of applications is November 21, 1995. Applicants for either position should submit a curriculum vitae, research/teaching statement, names and addresses of three references to: **Evolutionary Biology Search Committee or Quantitative Ecology Search Committee, Department of Biology, San Diego State University, San Diego, CA 92182.** *San Diego State University is an Affirmative Action/Equal Opportunity/Title IX Employer.*

ECOLOGIST

WASHINGTON UNIVERSITY

The Department of Biology invites applicants for a tenure-track appointment at the **ASSISTANT PROFESSOR** level, to begin in the fall of 1996. The candidate is expected to develop an active research program in any area of ecology and to teach at the undergraduate and graduate level. Candidates must have a Ph.D. degree, postdoctoral experience, evidence of significant research accomplishments, and a commitment to excellent teaching. Letters of application should be accompanied by a curriculum vitae, brief statements of research and teaching interests, and reprints of three selected papers. Applicants should also arrange to have three letters of recommendation sent to:

**Ecologist Search Committee
Department of Biology
Campus Box 1137
Washington University
1 Brookings Drive
St. Louis, MO 63130-4899**

All applications should be received by December 1, 1995. *Washington University is an Affirmative Action/Equal Opportunity Employer.*

Biology—Two tenure-track positions at the ASSISTANT or ASSOCIATE PROFESSOR level: Illinois College, a Phi Beta Kappa, church-related college in West Central Illinois, seeks candidates with broad interests in biology who have completed the Ph.D. and have a strong commitment to undergraduate teaching in a liberal arts college. Preference will be given to applicants who have experience in directing student research and advising pre-professional students. This growing department of biology currently has 100 majors.

One applicant should be prepared to teach courses in botany, an advanced field biology course in his or her area of specialization, and alternate teaching of the freshman introductory biology course. A small field station is located near the campus, and opportunities for field work with various governmental agencies are available.

One applicant should be prepared to teach cell/molecular biology, genetics, and an advanced course in his or her area of specialization.

Send application, curriculum vitae, transcripts, and the names, addresses and telephone numbers of three references to: **Dr. Elaine Chapman, Department of Biology, Illinois College, Jacksonville, IL 62650.** Screening of applications will begin November 1, 1995. *Illinois College is an Affirmative Action/Equal Opportunity Employer.*

BRINGING MOLECULAR BIOLOGY INTO THE INFORMATION AGE.



Incyte Pharmaceuticals is an innovative, public biotech company applying the tools of computer science to high-throughput cDNA sequencing, bioinformatics, and gene discovery. We offer the following exciting opportunities to join us in the development and commercialization of our comprehensive genomic database.

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PhD Molecular Biology or relevant discipline with 4+ years of post-graduate experience to be responsible for managing a large-scale library production facility. At least 2 years' biotech experience also required. Ref: LPM

DIRECTOR, SEQUENCING OPERATIONS

Experienced manager with strong background in DNA Sequencing, PhD in Molecular Biology (or related) and 4+ years' post-graduate experience. Familiarity with Robotics and automated sequencing technologies essential. Candidate must demonstrate ability to assume the day-to-day management of a production high-throughput sequencing operation. Ref: DSO

DIRECTOR, PRODUCTION INFORMATICS

PhD Scientist with 4+ years' experience in automated DNA sequencing, software development, LIMS setup, and genomic sequencing databases to be responsible for automated analysis of sequencing operation output, automated sample tracking, and setting up a large-scale genomic database. Strong management skills essential. Ref: DPI

SCIENTIST, TECHNOLOGY DEVELOPMENT

PhD Genetics or Molecular Biology with 2+ years of post-graduate experience. Experience with automated sequencing, robotics and enzymology of sequencing strongly preferred. You will develop new sequencing chemistries, integrate them into our production operation and evaluate new technologies. Ref: TD

DIRECTOR OF PRODUCT SUPPORT

Experienced manager with solid sales and marketing experience to be responsible for implementation and after-sales support of our LIFESEQTM product range at customer sites. You will manage preliminary customer assessments, on-site implementations including hardware/network configurations and bioinformatics issues, and user training programs. You will also develop product and support enhancements and manage a team of technical support staff. Strong interpersonal skills with a proven sales track record and/or customer support roles are essential. Considerable travel to Europe, Japan and US required. Biotech or computer industry experience strongly preferred. PhD in Molecular Biology or related field is a plus. Ref: DPS

DIRECTOR, GENOMIC SEQUENCING OPERATIONS

This position will be responsible for implementing our genome sequencing operation. You must have extensive familiarity with automated DNA sequencing and proven ability in managing a moderate to large scale sequencing group. PhD in Molecular Biology/Genetics desirable. Ref: GSO

PROGRAMMERS

BS/BA and at least 2 years of relevant experience, proficiency in UNIX, strong C and SQL skills, Sybase experience, and HTML/WWW interface development are essential. Preference will be given to candidates with a Molecular Biology or other biology background. This is an excellent opportunity for skilled and creative individuals to join a leading genomics company which has made a very significant commitment in the areas of computational bioanalysis and biological database development. Ref: PG

Incyte offers a premier R&D facility in the foothills of Palo Alto, California, along with competitive salaries, an outstanding benefits package, and significant opportunities for professional growth. Please mail/fax your resume to Incyte Pharmaceuticals, Inc., Attn: KRH/Ref. ____, 3174 Porter Dr., Palo Alto, CA 94304, FAX 415/855-0572. EOE.



I N C Y T E
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POSITIONS OPEN

LINTON BISHOP PROFESSORSHIP IN HUMAN GENETICS Department of Genetics/Molecular Medicine Emory University Medical School

Through the generosity of Dr. Linton Bishop's family, the Department of Genetics and Molecular Medicine is searching for an internationally recognized **GENETICIST** who will hold the appointment as the Linton Bishop Professor of Human Genetics. Individuals specializing in gene therapy, the molecular basis of disease, or population and quantitative genetics are of special interest. The Department of Genetics and Molecular Medicine occupies newly remodeled and equipped space that includes research laboratories, a diagnostic laboratory, a molecular histology laboratory, a developmental genetics laboratory, and a departmental genetics clinic. Within the context of the University's Clinical Research Facility, the department also has access to an ultramodern gene therapy suite, which includes two operating rooms that communicate with a biohazard containment laboratory, as well as three patient isolation rooms. Emory's suburban campus encompasses the Medical School, the undergraduate college, and three of five affiliated hospitals that draw patients from throughout the region. Interested individuals should send their curriculum vitae and the names of three references to:

Douglas C. Wallace, Ph.D.
Robert W. Woodruff Professor of Molecular Genetics
Chairman, Department of Genetics
and Molecular Medicine
1462 Clifton Road, Room 446
Emory University School of Medicine
Atlanta, GA 30322

Emory University is an Equal Opportunity/Affirmative Action Employer.

Biochemist/Williams College—The Chemistry Department invites applications for a tenure-eligible position at the **ASSISTANT PROFESSOR** level for fall 1996. (Senior appointment possible in exceptional circumstances.) This will be an initial appointment for a three-year term with teaching assignments in biochemistry and introductory chemistry. A semester teaching load normally includes complete responsibility for one course and two laboratory sections, and supervision of student research projects. Candidates should have the Ph.D. or completed dissertation by September 1996 (postdoctoral experience is preferred) and a strong commitment to teaching at the undergraduate level and developing a productive research program. Williams College is a highly selective, coeducational liberal arts institution of approximately 230 faculty and 2000 undergraduates, located in northwestern Massachusetts. The Chemistry Department, with ten faculty members and 30 to 35 majors each year, is accredited by the ACS and has excellent facilities for teaching and research. A new 40-million dollar science complex will be completed in the year 2000. *The College is actively working to increase the ethnic and gender diversity of its science majors and seeks an individual who can help us meet these goals.* Send résumé, undergraduate and graduate transcripts, description of research projects for undergraduates, and three letters of recommendation to: **Professor John W. Thoman, Jr., Chair, Department of Chemistry, Williams College, Williamstown, MA 01267**, by November 30, 1995. *Williams is an Equal Opportunity/Affirmative Action Employer.*

DEVELOPMENTAL GENETICS/BIOLOGY

The Department of Biology at the University of Central Florida invites applicants for a Tenure-Track Faculty position at the **ASSISTANT PROFESSOR** level starting August 1996. We are particularly interested in individuals using genetic and molecular approaches to understanding mechanisms of development in animal systems. A Ph.D. and postdoctoral experience or equivalent are required at the time of application. The successful candidate will be expected to have a productive research program that will gain extramural funding, and to participate in undergraduate and graduate teaching in Genetics and Developmental Biology. Candidates should submit a curriculum vitae, the names and addresses of three references, and statements of research and teaching interests. Screening will begin December 15, 1995. Send material to: **David T. Kuhn, Search Committee Chair, Department of Biology, University of Central Florida, Orlando, FL 32816**. *The University of Central Florida is an Equal Opportunity/Affirmative Action Employer.* As an agency of the State of Florida, all application materials and selection procedures are available for public review.

POSITIONS OPEN

INSECT SYSTEMATIST

The Department of Entomology, University of Kentucky invites applications for a 12-month, tenure-track **ASSISTANT PROFESSOR** of Entomology (85% research, 15% teaching) position studying insect systematics. Ph.D. in Entomology or Biological Sciences required; postdoctoral experience and evidence of successful funding preferred. We are searching for a modern insect systematist who works on economically important insects. Research topics might include, but are not limited to, phylogenetic studies, comparative studies and systematics of the morphology, ecology, behavior or genetics of beneficial or pest insect species. Use of molecular techniques is preferred. The successful applicant will be expected to develop and maintain a vigorous research program, compete for extramural funding, train M.S. and Ph.D. students, teach Insect Taxonomy, and develop a graduate-level course in the applicant's area of expertise. Send letter of application, résumé, transcripts of all university work, statement of research and teaching interest and philosophy, a copy of reprints, and request that four letters of reference be sent by February 15, 1996 to: **Dr. B. C. Pass, Chair, Department of Entomology, University of Kentucky, Lexington, KY 40546-0091**. *The University of Kentucky is an Equal Opportunity/Affirmative Action Employer.*

ANIMAL PHYSIOLOGIST

The Biology Department, Oberlin College, invites applications for a tenure-track faculty appointment to begin fall 1996. Although preference will be given to candidates at the rank of **ASSISTANT PROFESSOR**, outstanding applicants at the Associate Professor rank will also be considered. We seek a broadly trained animal physiologist who uses modern experimental methods to address questions at the organ/systems level. The successful candidate will be expected to teach an upper-level animal physiology course with laboratory, and a second upper-level course with laboratory in her or his area of interest; contribute to the teaching at the introductory level; and supervise individual undergraduate student research projects. He or she will also be expected to participate in the full range of faculty responsibilities including academic advising of undergraduates; serving on committees; and sustaining an active research program. A strong interest and potential excellence in teaching at the undergraduate level is essential. Postdoctoral experience is desirable. Send curriculum vitae, graduate transcript, and three letters of recommendation to: **Dr. Dennis N. Luck, Chair, Department of Biology, Oberlin College, Oberlin, OH 44074**. Review of applications will begin December 1, 1995 and continue until the position is filled. *Oberlin College admitted women since its beginnings in 1833, and has been historically a leader in the education of blacks. Affirmative Action/Equal Opportunity Employer.*

BIOLOGY/MYCOLOGY

ASSISTANT PROFESSOR, TENURE-TRACK. Ph.D. required. Broadly-trained mycologist with strong commitment to undergraduate teaching. Expectations: teach undergraduate and graduate mycology courses, including field courses and courses in area of expertise; participate in large general biology program; serve as mentor for undergraduate research and Master's theses; seek extramural funding. Send letter of application; curriculum vitae; description of research interests; names, addresses, and telephone numbers of three references to: **Dr. Douglas Meikle, Chair, Department of Biology, Appalachian State University, 572 Rivers Street, Boone, NC 28608**. Telephone: 704-262-3025. Completed applications due by December 1, 1995. *Appalachian State University is an Equal Opportunity Employer.*

ASSISTANT PROFESSOR OF BIOLOGY

Tenure-track fall 1996. Expertise in zoology and ecology to teach introductory zoology, participate in non-major course offerings, and teach upper-level courses in ecology and animal physiology or in an area of specialty. Ph.D. required, teaching experience preferred, must have interest in providing quality undergraduate instruction at a church-related college. Deadline for letter of application, official undergraduate and graduate transcripts, curriculum vitae, and names, addresses, and telephone numbers of three references is November 20, 1995. Send to: **Biology Search Committee, Personnel Office, Whitworth College, Spokane, WA 99251**. *Whitworth College strongly encourages females, persons of color, and persons with physical disabilities.*

POSITIONS OPEN

VERTEBRATE PHYSIOLOGIST Department of Organismic and Evolutionary Biology Harvard University

The Department seeks a vertebrate physiologist who employs comparative, integrative approaches to address major problems in whole organism physiology. The appointment will be to a tenured **PROFESSORSHIP**, and the incumbent will be expected to assume the Directorship of the Concord Field Station of the Museum of Comparative Zoology. We are especially interested in individuals whose research experience and interests are based on integrative approaches to understanding the diversity of form and function across major taxonomic groups. Applicants should submit by 20 November 1995 a curriculum vitae, a statement of research and teaching interests, and the names and addresses of three references to:

Professor Farish A. Jenkins, Jr.
Chairman, Vertebrate Physiology Search Committee
Department of Organismic and Evolutionary Biology
Harvard University
26 Oxford Street
Cambridge, MA 02138

Harvard University is an Affirmative Action/Equal Opportunity Employer. We encourage applications from women and minority groups.

PLANT MOLECULAR SYSTEMATIST University of Maryland, College Park

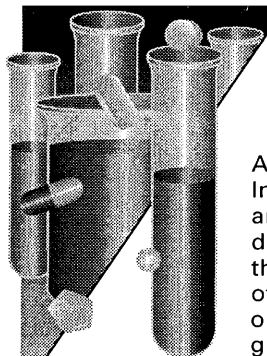
The Department of Plant Biology invites applications and nominations for a tenure-track position, preferably at the rank of **ASSISTANT PROFESSOR**, to begin by September 1996. Candidates must have a Ph.D. (or equivalent) in biological sciences and a strong knowledge of plant diversity. The successful candidate is expected to complement existing programs in ecology and evolutionary biology and to establish an outstanding, externally funded research program using modern methods of molecular biology and computer analysis to resolve fundamental systematic problems for plants in an evolutionary context. Teaching responsibilities include a general course in biology and an advanced course in molecular systematics. To apply, please submit a curriculum vitae, copies of published and in-press works, a description of current and projected research interests, a summary of teaching interests and experiences, and names and addresses (including Email addresses) of four references to: **Chair, Molecular Systematist Search, Department of Plant Biology, University of Maryland, College Park, MD 20742-5815**. For best consideration, applications should be received by December 15, 1995. *The University of Maryland is an Equal Employment Opportunity/Affirmative Action Employer. Women, minorities, and persons with disabilities are encouraged to apply.*

BEHAVIORAL ECOLOGIST

ASSISTANT PROFESSOR, tenure-track. Qualifications: Ph.D., commitment to teaching undergraduates in a liberal arts setting. Teach introductory biology, courses in the specialty, and develop a research program involving undergraduates. Send résumé, statement of research plans and undergraduate teaching philosophy, transcripts, and have three letters of reference sent to: **Dr. Gregg Kormanik, Chair, Department of Biology, University of North Carolina at Asheville, One University Heights, Asheville, NC 28804**. Review of applications will begin 1 December 1995. *University of North Carolina at Asheville is an Equal Opportunity Employer. Applications from underrepresented groups including minorities, women, and people with disabilities are encouraged.*

PLANT ECOLOGIST

Applications are invited for an **ASSISTANT PROFESSOR**, tenure-track position beginning September 1996. Ph.D. required; postdoctoral experience preferred. The applicant should be able to teach ecology, plant ecology, and plant taxonomy and develop a research program involving undergraduate and graduate students. Send curriculum vitae, copies of publications, and letters from three references to: **Dr. Carl Quettermus, Chair Search Committee, Biology Department, West Georgia College, Carrollton, GA 30118**. Telephone: 770-836-6547. For position information see <http://www.westga.edu/localhome.html>. Review of applications will begin December 1, 1995. *An Affirmative Action/Equal Opportunity Employer.*



POSTDOCTORAL FELLOWS

At The Glaxo Wellcome Research Institute, located in Research Triangle Park, N.C., the focus is drug discovery and development through novel research. As part of our commitment to research, our Postdoctoral Fellowship Programs support scientific endeavors and scholarships through the development of researchers at the early stage of their careers. We are currently seeking to fill three Postdoctoral Fellows in the following areas:

STRUCTURAL CHEMISTRY

We seek a recent Ph.D. in Analytical Chemistry or Biochemistry to perform research in deuterium exchange and mass spectrometry of proteins to examine higher order structure and interactions. Candidates with experience in mass spectrometry and protein biochemistry preferred. **Please refer to Job # ASC076401 on all resumes.**

MOLECULAR PHARMACOLOGY

Individual will investigate the role of orphan nuclear hormone receptors in the regulation of bone marrow cell differentiation. This will include an examination of the peroxisome proliferator activated receptors and their role in regulating marrow adipogenesis. Candidates should have a recent Ph.D. in Molecular Biology or related area and interest in transcriptional regulation. Experience in cell culture techniques required. **Please refer to Job # ASC076501 on all resumes.**

PHARMACOLOGY

Individual will isolate and characterize the function and regulation of intracellular proteins associated with the expression of intracellular calcium. Will design and conduct experiments to study this process in physiologic and pathophysiologic instances. Candidates must have a recent Ph.D. in Biochemical Pharmacology, Biochemistry, or Molecular Biology. Experience in protein isolation, purification, single cell isolation and culturing, and gene cloning preferred. **Please refer to Job # ASC076601 on all resumes.**

These Fellowship openings offer you the opportunity to strengthen your scientific reputation and career advancement by publication and presentation of outstanding research conducted in an excellent environment. In addition, Glaxo Wellcome is proud to offer a highly competitive compensation package. Applicants should send their curriculum vitae, a statement of research interest, a list of professional references, and the Job # of interest, to: **Human Resources Department, Glaxo Wellcome Research Institute, P.O. Box 13398, Research Triangle Park, NC 27709.** (No Phone Calls or Agency Referrals, Please.) An Equal Opportunity Employer M/F/D/V.

Glaxo Wellcome

National Institutes of Health / Public Health Service
Department of Health and Human Services

HEALTH SCIENTIST ADMINISTRATOR/MEDICAL OFFICER OFFICE OF AIDS RESEARCH

The National Institutes of Health (NIH) invites applications for the position of Health Scientist Administrator/Medical Officer, Office of AIDS Research, Office of the Director. This is a Civil Service position with a salary ranging from the GS-14 to GS-15 pay level per annum (currently \$60,925 to \$93,166, including locality pay). Medical Officers may be eligible for a salary up to \$97,386 plus a Physician's Comparability Allowance.

The Health Scientist Administrator/Medical Officer will serve as the Chair of the Therapeutics Coordinating Committee responsible for facilitating and coordinating efforts of the committee in strategic planning, identifying scientific opportunities, setting research priorities, and enhancing trans-NIH coordination and collaboration. The incumbent will analyze the recommendations made by major advisory committees and governmental oversight bodies for their impact on a diverse range of health care providers, researchers, advocacy groups, and the public, and will coordinate the implementation of these recommendations with the Institutes, Centers, and Divisions of NIH. The incumbent will identify issues and prepare position papers for conferences and workshops, prepare a variety of written materials used for congressional testimony and press conferences, serve on ad hoc task forces, and prepare speeches and informal remarks for the Associate Director for AIDS Research and other top-level NIH officials.

Applicants should submit either an Optional Application for Federal Employment (OF-612), or any other written format (including an SF-171 or resume); and a description of your accomplishments that demonstrate competence in the following Knowledge, Skills, and Abilities: (1) Knowledge of AIDS-related research in the study of Therapeutics; (2) Experience in preparing budgets and budget narratives; (3) Demonstrated skill in preparing verbal and written reports on complex scientific issues associated with the Therapeutics field; and (4) Experience in facilitating and coordinating committees with the goal of identifying scientific opportunities and setting research priorities. A complete application package may be obtained by calling (301) 402-4111 (vacancy announcement number OD-95-1084). The TDD number is (301) 402-1970. Application materials must be sent to the following address:

**NATIONAL INSTITUTES OF HEALTH
OFFICE OF THE DIRECTOR
PERSONNEL OFFICE
ATTN: Ms. GWEN CURRIE
BUILDING 31, ROOM 1C27
31 CENTER DR MSC 2264
BETHESDA MD 20892-2264**



Applications must be postmarked no later than January 2, 1996.

Selection for this position will be based solely on merit, without discrimination for non-merit reasons such as race, color, religion, gender, national origin, political affiliation, marital status, sexual orientation, physical or mental disability, age, or membership or non-membership in an employee organization.

NIH is an Equal Opportunity Employer

POSITIONS OPEN

TENURE-TRACK FACULTY POSITIONS Department of Microbiology and Immunology SUNY Health Science Center at Syracuse

The Department of Microbiology and Immunology at the SUNY Health Science Center at Syracuse invites applications for two tenure-track, full-time, positions at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level. Competitive applicants will have a Ph.D. degree or equivalent, postdoctoral experience, and a record of innovative research productivity. Applicants for Associate Professor should have current research funding. Preference will be given to candidates with research interests in microbial pathogenesis, molecular virology, and gene therapy. Salary, space, and start-up funds are competitive with national levels. Applications including a statement of research interests and goals; a curriculum vitae; and names, addresses, and telephone numbers for three references should be sent to: **Steven M. Taffet, Ph.D., Chair of the Search Committee, Department of Microbiology and Immunology, SUNY Health Science Center at Syracuse, 750 East Adams Avenue, Syracuse, NY 13210.** The deadline for applications is December 15, 1995.

The SUNY Health Science Center at Syracuse is an Equal Opportunity/Affirmative Action Employer.

Rose Houchins Distinguished Professorship of Radiochemistry

Applications are invited for a **ROSE HOCHINS DISTINGUISHED PROFESSORSHIP** of Radiochemistry in the Chemistry Department at the University of Missouri-Columbia. Appointment is anticipated for August, 1996. Special preference will be given to those whose interests complement ongoing research and who will take advantage of the University of Missouri Research Reactor (MURR). A Ph.D. chemist with an international reputation and exceptional research and teaching capabilities is sought. Candidates should submit a curriculum vitae, a brief description of research plans, and arrange to have three letters of recommendation sent from people familiar with their capabilities in chemistry to: **Professor Silvia Jurisson, Radiochemistry Faculty Search Chair, 123 Chemistry Building, University of Missouri, Columbia, MO 65211-0002.** The selection process will begin on January 7, 1996 and continue until the position is filled. *Applications from women and minority candidates are particularly encouraged. MU is an Equal Opportunity/Affirmative Action Employer.*

Invertebrate Zoologist. The Department of Biology at Illinois Wesleyan University has a tenure-track opening at the **ASSISTANT PROFESSOR** level in invertebrate zoology. The candidate should have a Ph.D., a broad background in biology, and a strong commitment to undergraduate excellence. Responsibilities include teaching invertebrate zoology (introductory course and upper-level seminar), the invertebrate lectures of the general biology course (six lectures), two general biology labs each semester, and a general education course. Teaching load is 24 contact hours per year. Facilities are housed in a new \$25 million science center. Appointment begins August 1996. Applicants should submit a letter of application, curriculum vitae, transcripts, a one page statement of teaching philosophy, and three letters of recommendation (including comments on teaching effectiveness) to: **Dr. Bruce B. Criley, Chair, Biology Department, Illinois Wesleyan University, P.O. Box 2900, Bloomington, IL 61702-2900.** Applications will be considered beginning November 1, 1995 and continue until the position is filled. *An Equal Opportunity Employer; women and minorities are encouraged to apply.*

ECOLOGY

The Department of Biological Sciences at Rutgers University in Newark invites applications for a **TENURE-TRACK** faculty position in Ecology. Outstanding applicants in all fields of specialization are encouraged to apply, but this research-oriented department is particularly interested in candidates working in physiological, community, or landscape ecology who would bring to the department strong technological, quantitative, or theoretical skills. The successful candidate is expected to develop and maintain an active research program. Teaching on the graduate and undergraduate levels is expected. Please send résumé and three letters of recommendation by December 15, 1995, to: **Dr. G. Miller Jonakait, Professor and Chairman, Department of Biological Sciences, 101 Warren Street, Rutgers University, Newark, NJ 07102.** *Rutgers University is an Equal Opportunity Employer.*

POSITIONS OPEN

PLANT ECOLOGY

The Department of Biology, Division of Ecology and Organismal Biology at The University of Memphis (formerly Memphis State University) invites applications for a tenure-track **ASSISTANT PROFESSOR** position in plant ecology. Applicants must have a Ph.D.; postdoctoral experience is preferred. Successful candidate will develop a strong, extramurally funded research program, direct M.S. and Ph.D. students, participate in teaching General Ecology, and develop upper-division and graduate courses in area of expertise. Preference will be given to applicants whose research interfaces/complements existing research interests.

Applicants should submit a letter of application, a curriculum vitae, a concise description of research and teaching interests, three reprints, and names of three references to: **Dr. Harold R. Bancroft, Department of Biology, Division of Ecology and Organismal Biology, The University of Memphis, Memphis, TN 38152. Telephone: 901-678-2592; Email: BancroftHR@MSUVX1.Memphis.edu; FAX: 901-678-4746.** Evaluation of applications will begin January 16, 1996 and continue until the position is filled. *Women and minority candidates are encouraged to apply. The University of Memphis is an Affirmative Action/Equal Opportunity Employer.*

ECOLOGIST—The Department of Biology at New Mexico State University expects to fill a tenure-track **ASSISTANT PROFESSOR** position in ecology for fall 1996. We seek an ecologist working with large-scale systems (ecosystem-level, landscape, or regional) with focus on the importance of animals (preferably vertebrate) for those systems. We also welcome applications from ecologists with a research focus on large-scale patterns of animal diversity and/or the conservation implications of those patterns. The successful candidate will develop a vigorous research program and will teach at the graduate and undergraduate levels, including participation in introductory biology courses. Ph.D. required by date of hire; postdoctoral experience preferred. The Department has a flourishing program in ecology and evolution, and offers research opportunities in the Jornada Long-Term Ecological Research program and other Southwestern environments. Submit curriculum vitae, concise statements of research and teaching interests, and the names, addresses, and telephone numbers of at least three references to: **Dr. Laura F. Huenneke, Ecology Search Committee, Department of Biology, New Mexico State University, Las Cruces, NM 88003.** Deadline for applications: 30 November 1995. *New Mexico State University is an Equal Employment Opportunity/Affirmative Action Employer. Offer of employment contingent upon verification of individual's eligibility for employment in the United States.*

ECOLOGY, BEHAVIOR

The University of North Carolina at Chapel Hill invites applications for a tenure-track position at the level of **ASSISTANT PROFESSOR** in the Department of Biology. We seek an outstanding individual in ecology or in animal behavior. We particularly encourage applications from individuals who use innovative methods to address integrative questions in these fields. The appointment will be effective July 1, 1996. Please submit a curriculum vitae, a statement of research and teaching interests, and three letters of recommendation to: **Ecology and Behavior Search Committee, Department of Biology, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599-3280.** Priority will be given to applications received by December 1, 1995. *The University of North Carolina is an Equal Opportunity/Affirmative Action Employer and strongly encourages applications from women and minorities.*

Full-time **ASSISTANT PROFESSOR**; tenure system; Michigan State University, beginning August 16, 1996. 75% in Lyman Briggs School, a residential undergraduate program in the College of Natural Science, and 25% in a suitable life-science department. Ph.D. in organismal, cell, or molecular biology required with strong interest in undergraduate teaching essential. Evidence of innovative teaching techniques favorably considered. Published research and the guidance of student research projects expected. Salary commensurate with experience (\$35,000 to \$40,000). Letter of application accompanied by a curriculum vitae and names of three references should be sent by December 1, 1995 to: **Edward Ingraham, Director, Lyman Briggs School, E-27 Holmes Hall, Michigan State University, East Lansing, MI 48825-1107.** *Members of protected classes are especially encouraged to apply.*

POSITIONS OPEN

VISITING ASSISTANT PROFESSOR IN PHARMACOLOGY UNIVERSITY OF HOUSTON

An immediate opening exists for a Visiting **ASSISTANT PROFESSOR** (non-tenure) in the Department of Pharmacological and Pharmaceutical Sciences at the University of Houston. Duties of the position include study of the function, signal transduction, and regulation of prejunctional adrenoceptors using neuronal cell culture and whole organ techniques; supervision of graduate students; grant preparation; and development of novel research initiatives. The successful candidate will have a Ph.D. in pharmacology or related field, at least three years of productive postdoctoral experience, and excellent communication skills. Experience in cell culture and cellular/molecular pharmacology is preferred. Salary will be commensurate with qualifications. Applicants should send a curriculum vitae and the names of three references to: **Dr. Douglas C. Eikenburg, Chair, Department of Pharmacological and Pharmaceutical Sciences, University of Houston, Houston, TX 77204-5515.** Review of applications will begin November 10, 1995 and continue until the position is filled. *The University of Houston is an Equal Opportunity/Affirmative Action Employer; minorities, women, veterans, and persons with disabilities are encouraged to apply.*

BEHAVIORAL NEUROSCIENCE

ASSISTANT PROFESSOR. The Department of Psychology at Yale University expects to make an appointment at the rank of Assistant Professor in behavioral neuroscience effective July 1, 1996. The Department emphasizes research interests in the analysis of learning and memory; however, outstanding candidates in all subspecialties including cognitive neuroscience are encouraged to apply. Applicants are expected to provide high-quality teaching at the undergraduate level and in a graduate Behavioral Neuroscience program, and to have exhibited (or shown very clear promise of) excellence in research. Applicants should send a letter of application, a curriculum vitae, papers or reprints, and should arrange for three letters of recommendation to be sent to: **Chair, Behavioral Neuroscience Search Committee, Department of Psychology, Yale University, P. O. Box 208205, New Haven, CT 06520-8205.** Deadline for completed applications: February 15, 1996. *Yale is an Equal Opportunity/Affirmative Action Employer, and applications from women and minority group members are especially encouraged.*

ECOSYSTEM/LANDSCAPE ECOLOGY

The Biology Department of George Mason University is seeking an **ASSISTANT PROFESSOR** for a tenure-track position to begin 1 September 1996. Applicants with research interests in the management of wetland or terrestrial ecosystems, and focusing on the dynamics interactions of plants, microorganisms, soils, and/or hydrology, are preferred. The successful candidate will be expected to develop an externally funded research program and contribute to both the undergraduate program in Biology and the graduate programs in Environmental Science and Public Policy, including supervision of M.S. and Ph.D. Students. Teaching responsibilities will likely consist of courses in the applicant's specialty and in the core curriculum. To apply, please send curriculum vitae, letter of appreciation, and three letters of recommendation, to be received no later than December 1, 1995, to: **Chairman, Ecologist Search Committee, 3E1, Department of Biology, George Mason University, Fairfax, VA 22030-4444.** *Affirmative Action/Equal Employment Opportunity.*

BIOLOGY

ASSISTANT PROFESSOR. Plant biologists who employ molecular, genetic, developmental, ecological, or evolutionary tools and perspectives in their research are encouraged to apply. The successful candidate will hold the Ph.D. degree in Plant Biology or Botany and will be expected to teach two undergraduate courses per semester and develop a research program that can involve undergraduates. Send curriculum vitae, letter of application addressing teaching and research philosophies as they interface with undergraduates, three letters of recommendation, and a mini-description of two or three courses for junior and senior biology majors that you would like to offer, to: **Dr. Derek Barkalow, Chair, Biology Department, Stetson University, DeLand, FL 32720.** Deadline for receipt of these materials is November 24, 1995. Start-up date is August 16, 1996.

**Scripps Institution of Oceanography
Center for Clouds, Chemistry, and Climate**

Scripps Institution of Oceanography (SIO) at the University of California, San Diego (UCSD) invites applications for appointment to a research position in the area of atmospheric chemistry.

The research appointments parallel University of California faculty appointments, but are without teaching requirements. For this atmospheric chemistry position applications for the appointment at assistant, associate, or full research scientist will be considered. Salary is commensurate with experience and based on the University of California salary scale. Partial salary support will be provided from various sources subject to availability of funds.

Candidates must hold a Ph.D and have demonstrated their ability to conduct high quality research. Research area may include chemistry of tropospheric gases and aerosols, with an emphasis on atmospheric observations. The successful candidate will be expected to establish an extramurally funded research program and to involve SIO graduate students. There will be opportunities to interact with an international and interdisciplinary group of researchers in clouds and climate, and to participate in on-going field experiments involving aircraft, ships, and surface observations.

Closing date is January 31, 1996. Applicants should send a curriculum vitae, selected reprints, a list of at least three references and a brief statement of research interests to:

V. Ramanathan, Director
Center for Clouds, Chemistry, and Climate
Scripps Institution of Oceanography
University of California, San Diego
9500 Gilman Drive
Mail Code 0239
La Jolla, CA 92093-0239

The University of California is an equal opportunity employer.

BIOLOGICAL PROCESS SCIENCES
Investigator/Senior Investigator

SmithKline Beecham, a world leader in pharmaceutical research, currently has an opportunity for an Investigator to join our Biological Process Sciences department.

The successful candidate will evaluate technology for viral screening assays, track and report progress on project development, qualify assay protocols, prepare SOPs, supervise 1-2 technicians and perform retrospective validation of test article storage conditions. Significant hands-on laboratory work is required.

Qualifications include a PhD in Virology or related field plus at least 1 year postdoctoral experience, or MS with 8 years' relevant experience, or BS with 10 years' relevant experience. Background in viral screening assays to include plaque, co-cultivation and immuno assays and assay by detection of CPE and/or hemadsorption/hemagglutination on indicator lines also required. Willingness to work in BioSafety Level 2 environment and PC skills are imperative. Familiarity with GLP, cGMP and 21 CFR is preferred.

Located in our state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham offers a competitive compensation/benefits package, and a stimulating work environment. Interested applicants should forward their resume to: SmithKline Beecham Pharmaceuticals, Job Code H0280, P.O. Box 2646, Bala Cynwyd, PA 19004. We are an Equal Opportunity Employer, M/F/D/V.



SmithKline Beecham
Pharmaceuticals

Challenging the natural limits.



Wayne State University

THE DEPARTMENT OF PHARMACOLOGY, WAYNE STATE UNIVERSITY SCHOOL OF MEDICINE, invites applications for TENURE TRACK POSITIONS at The ASSISTANT/ASSOCIATE PROFESSOR level.

Candidates using contemporary approaches to study signal transduction, vesicular trafficking, cell cycle regulation, transcriptional regulation, and protease/protease inhibitors are preferred. Responsibilities include establishing an outstanding independent and extramurally-funded research program and teaching of pharmacology to medical and graduate students. Faculty may participate in the training of graduate students in pharmacology as well as in interdisciplinary degree programs in cancer biology and/or molecular toxicology.

Opportunities are available for research interactions with faculty in the Karmanos Cancer Institute, the Institute for Chemical Toxicology, the Center for Molecular Medicine, the Neuroscience Program and the Neurotrauma Center.

Candidates should have a Ph.D. or equivalent degree with appropriate postdoctoral training. Highly competitive salary and start-up packages are available for these positions. Applications will be accepted until the positions are filled. A CV, a statement of research interests and reprints of up to three relevant publications should be forwarded to: **Dr. David Kessel, Chair, Faculty Search Committee, Wayne State University, School of Medicine, Department of Pharmacology, 540 E. Canfield, Room 6374, Detroit, MI 48201.** Candidates should arrange to have three letters of reference sent directly to Dr. Kessel.

Wayne State University is an equal opportunity/affirmative action employer. All buildings, structures and vehicles at WSU are smoke-free. Wayne State University - People working together to provide quality service.

Purdue University

Solid-Earth Geochemist

The Department of Earth and Atmospheric Sciences, Purdue University, invites applications for a tenure-track position at the Assistant Professor level. We seek an outstanding Ph.D. solid-earth geochemist with a strong background in earth materials who will develop an innovative research program. Areas of specialty might include, but are not restricted to crust mantle processes, mineral physics, reaction kinetics, environmental geochemistry, and biogeochemistry. Preference will be given to candidates interested in pursuing research at the interface of special study areas of the department and university. The successful applicant is expected to have the ability to obtain external support for his/her research program, as well as the ability to teach courses in mineralogy and petrology and introductory and advanced courses in their area of expertise.

The Department of Earth and Atmospheric Sciences consists of 28 full-time faculty, and confers B.S., M.S., and Ph.D. degrees in both solid-earth and atmospheric sciences. First-rate facilities are available within the department, and elsewhere on the campus, for performing essentially all wet/dry geochemical investigations. Additional information on the department is available on Internet's World Wide Web at <http://meteor.atms.purdue.edu>.

Applicants should submit a resume, transcripts, and a statement of research and teaching interests and objectives, and the names, addresses, and telephone/fax numbers of at least three references to:

Geochemist Search Committee
Department of Earth & Atmospheric Sciences
1397 Civil Engineering Bldg.
Purdue University
West Lafayette, IN 47907-1397

Deadline for receipt of applications is January 1, 1996.

Purdue University is an equal opportunity/affirmative action employer and encourages applications from women and members of minority groups.

Myriad Genetics, located adjacent to the University of Utah, is a biotechnology company focused on the isolation of significant disease-causing genes. We currently have immediate openings for:

Scientists

Requires a PhD or equivalent and a strong background in molecular biology, informatics or genomic research.

Molecular Biology Technicians

Requires an M.S. degree or B.S. degree and a minimum of two years molecular biology experience. ABI sequencing and/or linkage analysis experience preferred.

We offer a competitive compensation package and a highly stimulating, interactive environment. Please send or fax your C.V., including references to: **Barbara Berry, Human Resources Dept. SM, Myriad Genetics, Inc., 390 Wakara Way, Salt Lake City, UT 84108. Fax: 801-584-3640. EOE.**



MYRIAD

POSITIONS OPEN

PLANT PHYSIOLOGIST

The Department of Biology at the University of Minnesota-Duluth invites applications for a tenure-track **ASSISTANT PROFESSOR** position in plant physiology beginning September 1, 1996. The position requires a Ph.D. (by 9/1/96) and prior teaching experience; postdoctoral research experience is desirable. Responsibilities will include: teaching plant physiology, general biology, and advanced specialty topics; actively participating in graduate education (emphasis at M.S. level); establishing a strong, externally funded research program in plant physiology; and advising students. Research focus is open and collaborative efforts will be encouraged. Model systems may include vascular plants, algae, fungi, or bryophytes. The successful applicant should have demonstrated competence with molecular approaches. Send curriculum vitae, copies of undergraduate and graduate transcripts, a statement of teaching/research interests and goals, up to three reprints, and three letters of recommendation that address teaching and research potential to: **Dr. Randall E. Hicks, Search Chair, Department of Biology, 10 University Drive, University of Minnesota, Duluth, MN 55812.** Applications must be postmarked by December 1, 1995. Only completed applications can be considered. *The University of Minnesota is an Equal Opportunity Educator and Employer.*

FACULTY POSITION UNIVERSITY OF PENNSYLVANIA

The Microbiology Department in the School of Dental Medicine is seeking an outstanding scientist for a tenure-track faculty position at the **ASSISTANT/ASSOCIATE PROFESSOR** level. The successful candidate is expected to develop a high-quality independent research program in basic viral-host cell mechanisms funded by extramural support. Preference will be given to an established investigator with an ongoing research program. Appointment at the Associate Professor level requires a strong record of research productivity, funding, and excellence in teaching. The candidate is expected to teach modern aspects of microbial infectious disease to dental students, establish a vigorous research program, interact with faculty at Pennsylvania, and be involved in graduate student training. The candidate must have either a Ph.D./D.M.D. or M.D. and extensive postdoctoral training. A curriculum vitae, three letters of recommendation, a statement of research interests, and pertinent publications should be sent to: **Dr. Gary H. Cohen, Professor and Chair, Department of Microbiology, School of Dental Medicine, University of Pennsylvania, 4010 Locust Street, Philadelphia, PA 19104.** *University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer. Females and minorities are encouraged to apply.*

ASSISTANT PROFESSOR Molecular/Developmental Biology

The University of Rochester anticipates an opening for an **ASSISTANT PROFESSOR** of Biology. Applicants must have demonstrated outstanding potential for independent work in the area of Molecular or Developmental Biology. The Biology department consists of 22 faculty who employ genetic and molecular approaches to problems in cell, molecular, and developmental biology; evolutionary biology; and ecology. Additional faculty with allied interests are located in the adjacent Medical School. Applicants should submit before December 1, 1995, a curriculum vitae, bibliography, description of research and teaching interests, and should request three references to send letters of recommendation to: **Chair, Molecular/Developmental Search Committee, Department of Biology, University of Rochester, Rochester, NY 14627.**

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

Biology-MacMurray College, a private United Methodist liberal arts college, is seeking a full-time faculty member in Biology. **TENURE-TRACK.** Qualifications: Ph.D., teaching experience, and expertise in the following areas: cell biology, genetics, biochemistry, microbiology, and histology. Will also share teaching introductory course. Salary and rank commensurate with education and experience. Please send letter of application, curriculum vitae, teaching philosophy, graduate transcripts, and the names and telephone numbers of three references to: **Dr. Jim Goulding, Vice President for Academic Affairs, MacMurray College, 447 East College, Jacksonville, IL 62650.** Deadline is November 17, 1995. *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN



FACULTY POSITION SYSTEMS NEUROPHYSIOLOGY/PAIN MCGILL UNIVERSITY

Applications are invited for a full-time **TENURE-TRACK** position to be held jointly between the Department of Physiology, Faculty of Medicine, and the Faculty of Dentistry. The successful applicant will be a system neurophysiologist with established expertise in pain research who will be expected to establish a successful research program and to contribute to the development of a multidisciplinary research initiative. Responsibilities will also include teaching medical and dental students. Rank and salary will be commensurate with experience. Applications must be received by December 15, 1995. The appointment will commence as soon as a suitable candidate is found. Please forward a curriculum vitae and the names of three referees to:

**Dr. P. B. Noble
Department of Oral Biology
Faculty of Dentistry
McGill University
3640 University Street
Montreal, QC H3A 2B2 Canada**

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Biology. Clarkson University is seeking applications for a tenure-track position at the **ASSISTANT PROFESSOR** level. Postdoctoral experience is required and research should be in the area of Biochemistry/Protein Chemistry using molecular approaches. Research interactions with the Senior Scientists at the W. Alton Jones Cell Science Center in Lake Placid would be encouraged. Anticipated teaching load is two courses a semester, and may include: Biochemistry with Lab, Biotechnology, Molecular Biology, and some duties in the Introductory sequence. Clarkson University is located in a college-town environment in the foothills of the Adirondack Mountains. The Department offers degrees at the Bachelor's, Master's and Doctoral levels (M.S. and Ph.D. in conjunction with the Department of Chemistry). Send curriculum vitae, statement of research and teaching interests, and the names of three references to: **Dr. Michael H. Roberts, Department of Biology, Box 5805, Clarkson University, Potsdam, NY 13699-5805.** Applications will be reviewed on arrival; however, applications arriving by November 17, 1995 will receive full consideration. *Clarkson University is an Equal Opportunity/Affirmative Action Employer. Position No. 24.*

American University in Cairo (AUC). Applications are invited for one faculty opening at the **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** level for a biologist to teach, in English, General Biology and a section of the core curriculum's required course in Scientific Thinking. Preference will be given to specialists in environmental biology and/or botany. Ph.D. required. AUC particularly seeks applicants with a demonstrated record or strong promise of excellence in teaching. Scholarly/research experience or potential is expected. Normal teaching load is nine hours per semester. Two-year appointment (renewable) begins September 1996. Rank, salary according to qualifications and experience. For expatriates, housing, roundtrip air travel, plus schooling for up to two children included. Write with curriculum vitae to: **Dr. Andrew Kerek, Provost, The American University in Cairo, 866 United Nations Plaza, Suite S-517, New York, NY 10017,** preferably before November 30, 1995. *AUC is an Equal Opportunity Employer.*

FACULTY POSITION

The Department of Surgery, Wayne State University, invites M.D./Ph.D. applicants to manage a Burn Research Laboratory presently interested in translocation of bacteria and other infectious problems of burned patients. Applicants must have an emphasis in immunology/microbiology and have postdoctoral experience. Please send curriculum vitae to: **J. K. Prasad, M.D., Director, Burn Center, 3V-26, 4201 Saint Antoine, Detroit, MI 48201.** *Wayne State University is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ANIMAL PHYSIOLOGIST

The Trinity College Department of Biology invites applications for a tenure-track position at the level of **ASSISTANT PROFESSOR** to begin in the fall term, 1996. Applicants must have a Ph.D. (postdoctoral experience is preferred, but not required) and should have a record of teaching and scholarship in neurobiology so that participation in our Neuroscience Program is possible. Annual teaching duties include an animal physiology course (preferably comparative animal physiology) and participation in team-taught courses of introductory biology and of neurobiology; in addition, it is expected that an advanced course in the area of the applicant's interest and a course for non-majors will be offered in alternate years. The candidate should pursue a program of research in the neurosciences in which upper-level students may participate. Excellent facilities and start-up funds are available. Send curriculum vitae (including statements on approach to teaching, and of current research interests), graduate and undergraduate transcripts, and have three letters of recommendation forwarded to: **Robert H. Brewer, Chair, Department of Biology, Trinity College, Hartford, CT 06106.** Evaluation of applications will begin 1 December 1995 and continue until the position is filled. *Trinity College is an Equal Opportunity/Affirmative Action Employer and actively seeks applications from minorities and women.*

FACULTY POSITIONS IN PHYSIOLOGY, IMMUNOLOGY, NEUROBIOLOGY AND BIOCHEMISTRY

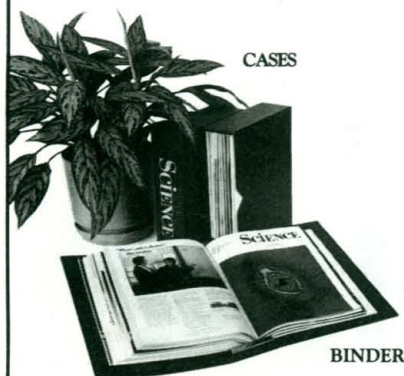
The Department of Biology at Georgia State University invites applications for three anticipated **TENURE-TRACK** positions, one each in physiology, immunology, and neurobiology. Areas of research interest for the physiology position should complement existing research strength in renal physiology and neuroendocrinology. The area for the immunology position should involve molecular approaches. The area for the neurobiology position should be in computational neuroscience. Appointments will start on or before September 15, 1996. Applicants will be considered at the advanced assistant professor or more senior level. It is desirable for applicants to have current funded research programs. Successful candidates will be expected to maintain independent research programs, supervise M.S. and Ph.D. students, and participate in instruction at the undergraduate and graduate levels. The Department has several core facilities housing numerous shared equipment, including: DNA/protein synthesizers and sequencers, a cell sorter, a phosphorimager, capillary electrophoresis and chromatography systems, image analysis and electron microscopes, and data analysis work stations. Applications including curriculum vitae, reprints, statement of research plans, and three letters of reference should be sent to: **Chair of Search Committee (Physiology, Immunology or Neurobiology), Department of Biology, P.O. Box 4010, Georgia State University, Atlanta, GA 30302-4010.** Deadline for receipt of application is December 11, 1995.

The Department of Chemistry invites applications for an anticipated **TENURE-TRACK** position in Biochemistry. Candidates will be expected to establish a vigorous, externally funded research program and attract students in an expanding Ph.D. program. Expertise in protein or nucleic acid chemistry is preferred; access to departmental NMR facilities (300, 400, 500, 600 MHz) and Biology core facilities is available. Excellence in teaching at all levels expected. Send curriculum vitae, description of proposed research, and three letters of recommendation by December 11, 1995 to: **Prof. Dixon, Department of Chemistry, Georgia State University, Atlanta, GA 30303.**

Georgia State University, a unit of the University System of Georgia, is an Equal Opportunity/Affirmative Action Employer.

DIRECTOR, Cytogenetics Laboratory: The Division of Human Genetics of the Children's Hospital Research Foundation (CHRF) seeks a ABMG Clinical Cytogenetics certified or eligible M.D. or Ph.D. to direct its service and research activities. Responsibilities include amniotic cells, CVS, blood and tumor karyotype and FISH analyses, and development of research program. Academic rank determined by qualifications. Send curriculum vitae, bibliography and three letters of recommendation to: **Gregory A. Grabowski, M.D., Director, Division of Human Genetics, CHRF, 3333 Burnet Avenue, Cincinnati, OH 45229-3039.** *Children's Hospital Medical Center is an Affirmative Action/Equal Opportunity Institution. Women and minorities are encouraged to apply.*

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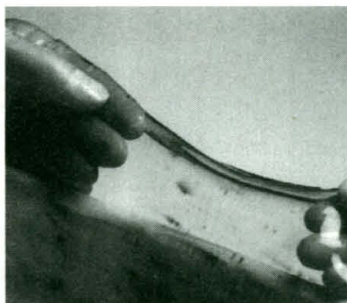
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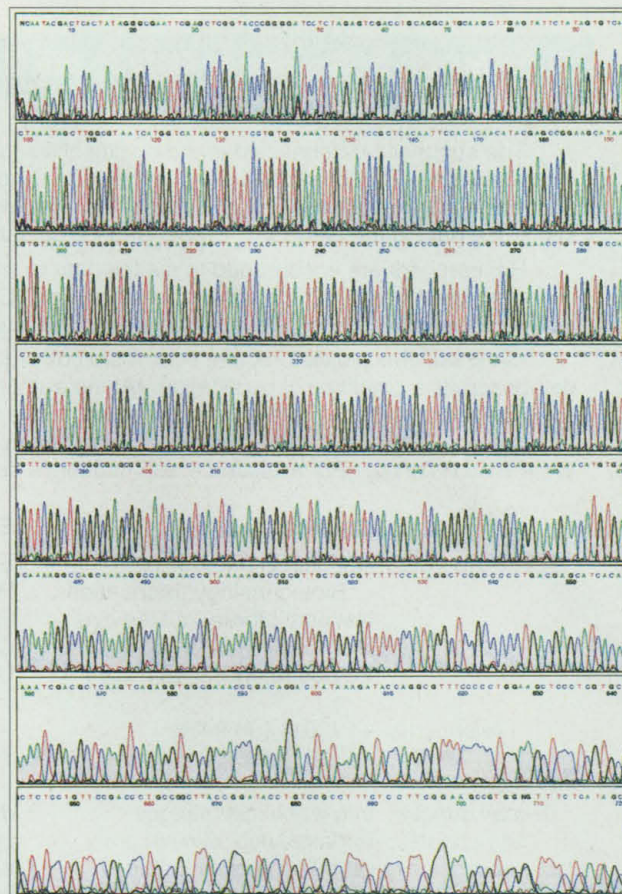
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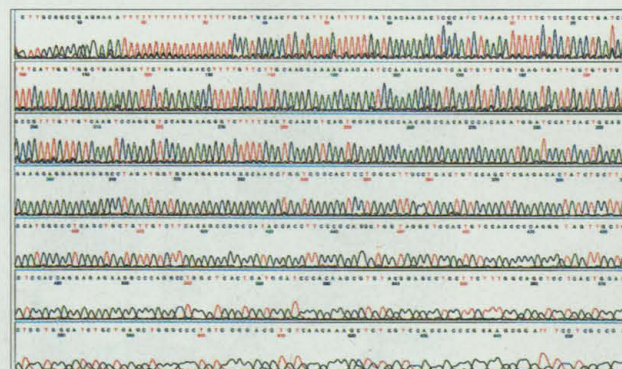
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1. Proc. Natl. Acad. Sci., USA, 92(14), pp.6339-6343, (1995).

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Researchers are encouraged to submit data to whichever of the three databases is most convenient. The receiving database will transmit the data to the other two. Collectively, the databases make the sequence information available to scientists throughout the world through the Internet and CD-ROM subscriptions.

Many editorial policies require submission of sequence data and the issuance of an accession number by the databases as a condition of publication. (At the authors' option, sequence data may be kept confidential until publication.) Including the accession number in publications makes it easy for users to retrieve the sequence from the databases. Sequence data can be submitted using free software for PC and Macintosh computers or through the World Wide Web (WWW). For assistance with sequence submission, contact the most convenient database:

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Faculty Positions in Genetics

Dartmouth Medical School

Through the generous support of the Lucille P. Markey Charitable Trust, Dartmouth Medical School is recruiting faculty in genetics. Appointees are expected to maintain excellent research programs that address fundamental questions in an area of genetics that includes microbial genetics, cancer genetics, gene therapy, mouse or human genetics, or model systems such as yeast, drosophila, and zebra fish. Appointees will also participate in the teaching of genetics to graduate and medical students.

Applications are especially encouraged from established investigators at the Associate Professor level, but candidates of all ranks are encouraged to apply. Appointments will be in an appropriate basic science department at Dartmouth Medical School.

Review of applications will begin on November 1, 1995. Please send a CV, a description of research interests, and arrange for three letters of recommendation to be sent to: Professor Constance Brinckerhoff, Ph.D.; Dartmouth Medical School; Box 7200, Vail Building; Hanover, NH 03755.

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Director

Program in Human and Medical Genetics

The University of Colorado Health Sciences Center, in Denver, seeks candidates for the position of Director of a newly formed program in Human and Medical Genetics. Entities involved in this program include the Schools of Medicine, Dentistry, Nursing and Pharmacy, the Eleanor Roosevelt Institute for Cancer Research, and The Childrens Hospital. The Program Director is expected to integrate already substantial efforts in clinical genetics and genetics research and education on the campus, to develop new research initiatives, and to develop and direct a doctoral program in human and/or medical genetics. The successful candidate should be a senior M.D., M.D./Ph.D. investigator with a national or international reputation in basic and/or clinical genetic research. Administrative experience, and the ability to lead and interact effectively with substantial resources to this position, including competitive personal compensation and start up funds for the Director, faculty positions, research space, and funds for program initiatives. Review of applicants will begin on Jan. 15, 1996, and continue until a successful candidate is identified. Letters of interest, together with c.v., should be sent to:

**Stephen I. Goodman, M.D., Head
Genetics Search Committee, Box B-161
University of Colorado Health Sciences Center
4200 East Ninth Avenue
Denver, Colorado 80262**

The University of Colorado Health Sciences Center is committed to equal opportunity and affirmative action.

INTERNATIONAL GRADUATE STUDENT FELLOWSHIP PROGRAM at the AMERICAN MUSEUM OF NATURAL HISTORY CENTER FOR BIODIVERSITY AND CONSERVATION

Program: The International Graduate Student Fellowships Program at the Museum's Center for Biodiversity and Conservation provides an outstanding opportunity for non U.S. citizens to study a diversified curriculum in systematics, biodiversity, conservation, and public policy. Students are able to choose among the numerous offerings of four major universities to create a graduate program from which they will bring an interdisciplinary mix of skills and experience to bear on the environmental problems of their countries.

Students are part of a joint Museum-university program offering the Ph.D. degree. Under the direction of a Museum curator, students will attend classes and seminars at both the Museum and their chosen university.

Eligibility: This program is open to non U.S. citizens. Applications are particularly encouraged from students from developing nations. Applicants must have a bachelors degree, and be able to fulfill university admission requirements. These include TOEFL and Graduate Record Examinations.

Awards: The fellowship will provide travel assistance, stipend support for 12 months, and tuition. Support is for 4 years, renewable annually providing the student remains in good standing.

Contact: Applicants should first contact the Office of Grant and Fellowships to discuss their interests, background and eligibility for the Program.

Application Procedure: Students must simultaneously apply to the Museum AND to one of 4 cooperating universities depending on field of study.

1. Application to the Museum is on prescribed forms and will include a resume of the student's academic background, work experience, research interests, statement of purpose, and the names of two references familiar with the student's work. Application deadline is January 1, 1996.

2. Application to one of the universities listed below should be made based on field of interest and submitted by the university's deadline date. Students should contact the university for application forms.

Evolutionary Biology: Office of Admissions, The Graduate School, The City University of New York, 33 West 42 Street, New York, NY 10036-8099 Deadline: April 15, 1996

Molecular Biology/Biological Sciences: Office of Student Affairs, The Graduate School of Arts and Sciences, Columbia University, 107 Low Library, New York, NY 10027 Deadline: January 4, 1996

Biology/Systematics: Department of Biology, Graduate Program, Yale University, P.O. Box 208103, New Haven, CT 06620-8103 Deadline: January 2, 1996

Entomology: Office of Admissions, The Graduate School, Cornell University, Sage Graduate Center, Ithaca, NY 14853-6201 Deadline: January 10, 1996

Request Museum application forms and further information from:

**Office of Grants and Fellowships
American Museum of Natural History
Central Park West at 79th Street
New York, NY 10024
Telephone: 212-769-5467 Fax: 212-769-5495
E-mail: bynum@amnh.org**

POSITIONS OPEN

UNIVERSITY OF NORTH CAROLINA AT CHARLOTTE

The Biology Department at University of North Carolina (UNC) Charlotte seeks to fill the following vacancies.

(1) **BIOLOGY CHAIR**: 12-month appointment, beginning July 1996. Department offers B.A., B.S., M.A., and M.S. degrees, and is developing a proposal for an interdisciplinary Ph.D. program. Faculty teach and conduct research in a range of traditional fields and participate in multidisciplinary programs such as biotechnology and medical technology, and conduct collaborative education in association with hospitals and research centers. Candidates must have earned doctorate, research and grant experience, and provide strong leadership in research and undergraduate/graduate education. Previous administrative experience preferred. Appointment will be at Associate Professor or Professor, with salary and teaching load competitive. Teaching and research areas are open, but the Department has declared an emphasis in biomedical/biotechnology and seeks to strengthen those areas. Candidates should send a letter outlining professional accomplishments relevant to this position, a curriculum vitae, and names of three references to: **Dr. Farid Tranjan, Chair, Biology Search Committee, UNC Charlotte, Charlotte, NC 28223.** (2) **PHYSIOLOGIST: ASSISTANT/ASSOCIATE PROFESSOR**, tenure-track. Ph.D. and postdoctoral experience required. Candidates must have an independent research program, a record of securing extramural funding, a commitment to quality undergraduate/graduate teaching, and ability to teach mammalian physiology. Candidates should send a letter outlining qualifications, a curriculum vitae, and names of three references to: **Chair, Physiology Search Committee, Biology Department, UNC Charlotte, Charlotte, NC 28223.**

PROFESSOR AND CHAIR OF PHARMACOLOGY AND CELL BIOPHYSICS

The University of Cincinnati College of Medicine invites applications and nominations for **CHAIR** of this department, which has a history of academic and research excellence. Current faculty support includes two training grants and two NIH Merit awards. The College receives approximately \$60 million in sponsored program awards and has significant interdisciplinary programs of distinction in cardiology, neuroscience, and oncology. Faculty have been internationally recognized for expertise in the generation/evaluation of transgenic mice. The college is developing an interdisciplinary Structural Biology program with 750, 600, and 500 MHz NMRs.

We seek qualified candidates with distinguished records in research, teaching, and service, and demonstrated excellence in leadership and administration. Individuals with nationally and internationally recognized and funded research programs in molecular approaches to pharmacology or related disciplines are particularly encouraged to apply. The Chair is responsible for medical and graduate instruction in pharmacology as well as for maintaining and developing outstanding, externally supported research programs within the department. Review of candidates will begin in late 1995. Send nominations and applications (include letter of interest, curriculum vitae, and three references) to: **Jerry B. Lingrel, Ph.D., Pharmacology Search Committee Chair, University of Cincinnati College of Medicine, 231 Bethesda Avenue, Cincinnati, OH 45267-0524.** *University of Cincinnati is an Affirmative Action/Equal Opportunity Employer. Women, Minorities, Disabled, Veterans encouraged to apply.*

CHAIR

Department of Biology and Chemistry

The University of Montevallo invites applications for an anticipated position as **CHAIR** of the Biology-Chemistry department. Ph.D. in either biology or chemistry required; prefer zoologist capable of teaching comparative vertebrate anatomy, or chemist with background in inorganic or physical chemistry. Teaching experience and a strong dedication to undergraduate teaching and research are required. Administrative experience is desirable. Send curriculum vitae and three letters of recommendation to: **Dr. Steve O'Donnell, Acting Chair, Department of Biology and Chemistry, The University of Montevallo, Montevallo, AL 35115.** Review of applications begins immediately and continues until position is filled. *The University of Montevallo is an Affirmative Action/Equal Opportunity/Americans with Disabilities Act Employer.*

POSITIONS OPEN

ASSOCIATE DIRECTOR Applied Marine Research Laboratory (AMRL)

The AMRL, a self-supporting research program affiliated with Old Dominion University (ODU), has a position available immediately for applicants with strong experience and interest in providing a leadership role in marine and environmental research. Responsibilities include operational management, supervision of managers for several laboratories, proposal and report preparation and review, research administration, and representation of the program to funding agencies and the public. This position also serves as a principal investigator on multidisciplinary projects for government agencies and the private sector. A Ph.D. in marine or related environmental science, and at least five years of experience in designing and conducting research projects, is required. Preference will be given to an applicant with evidence of significant extramural support and experience in leading multidisciplinary teams of investigators. While the area of expertise is open, special consideration will be given to applicants with experience in environmental toxicology or pollution ecology. The successful applicant should also have good communication and personnel management skills, as well as a hands-on approach to working with technical staff and academic investigators. Adjunct faculty appointments are possible with various academic departments. Some travel is required. An application letter outlining professional experience and interests; a curriculum vitae; and names, addresses, and telephone numbers of at least four professional references must be sent to: **ODUR, P.O. Box 6369, Norfolk, VA 23508-0369.** Expected hire date is February 1, 1996. *Equal Employment Opportunity/Affirmative Action Employer.*

ASSOCIATE PROFESSOR CHEMICAL EDUCATION

As part of the ongoing commitment to improve chemical education at the University of Nebraska-Lincoln, the Department of Chemistry invites applications for a **TENURE-TRACK POSITION** in Chemical Education. The candidate should have a Ph.D. degree in Chemistry or a closely related science; have substantial experience in chemical education, especially innovative general chemistry teaching; and should have established a nationally competitive, funded program in chemical education research. Experience in outreach activities, laboratory development, computer-aided instruction, and multimedia based education are also desirable. Please submit a curriculum vitae, a summary of research plans and a teaching portfolio, and arrange to have three letters of recommendation sent to: **Professor Gerard Harbison, Search Committee Chair, Department of Chemistry, University of Nebraska-Lincoln, Lincoln, NE 68588-0304.** Telephone: 402-472-9346; FAX: 402-472-2044; Email: gerry@wendigo.unl.edu. Deadline is November 30, 1995 or until position is filled.

The University of Nebraska-Lincoln is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity and is responsive to the needs of dual career couples. We assure reasonable accommodation under the Americans with Disabilities Act; please contact Diane Stevens, Telephone: 402-472-2745; FAX: 402-472-9402 for assistance.

ASSISTANT PROFESSOR OF GENETICS

Applicants are sought for a full-time, **TENURE-TRACK** position in an area of Genetics. Applicants will be expected to establish a competitive research program using genetic analysis on a model system. Suitable areas of research include, but are not limited to, genome structure and function, genetics of development, neurogenesis, signal transduction, and cellular processes. Teaching obligations will include undergraduate courses in genetics or cell biology and upper-division and graduate teaching in the applicant's area of expertise. A Ph.D. and relevant postdoctoral experience is required. Applicants should send curriculum vitae, statement of research interests, up to five reprints, and the names and addresses of three referees to: **Genetics Search Committee, Department of Biological Sciences, Simon Fraser University, Burnaby, BC V5A 1S6 Canada.** Applications should be received by December 15, 1995. All positions are subject to budgetary authorization.

In accordance with Canadian Immigration requirements, this ad is directed in the first instance to Canadian citizens and permanent residents of Canada.

Simon Fraser University is committed to the principle of equity in employment and offers Equal Employment Opportunities to qualified applicants.

POSITIONS OPEN

Animal Ecologist. Tenure-track, **ASSISTANT PROFESSOR**, beginning fall 1996 in the Department of Biology at Colorado College: a private, undergraduate, highly-selective, liberal arts institution enrolling 1900 students. Responsibilities include teaching introductory ecology, advanced ecology, and vertebrate zoology and development of a field-oriented research program involving undergraduates. Ability to teach population genetics highly desirable. Ph.D. required. *The College particularly seeks candidates who understand the perspectives of women and minorities in the curriculum and invites candidates to identify their strengths or experiences in these areas.* Applicants should send: 1) cover letter describing professional background, goals, strengths, and experiences, 2) statement of teaching philosophy, 3) description of current and future research plans, 4) curriculum vitae, 5) official transcripts, and 6) four letters of recommendation to: **Richard Storey, Chair, Department of Biology, Colorado College, Colorado Springs, CO 80903** by December 8, 1995. *Colorado College is an Equal Opportunity Employer and a participant in the minority faculty registry.*

ASSISTANT PROFESSOR OF MOLECULAR MICROBIOLOGY

The Department of Biology at Virginia Tech invites applications for a tenure-track, **ASSISTANT PROFESSOR** position for August 1996. Applicants should have postdoctoral experience and a broad background in microbiology. The successful candidate will develop a competitive research program using molecular techniques to explore fundamental processes in microbial cells. Responsibilities will include undergraduate and graduate teaching in microbiology. A letter of application, curriculum vitae, statement of both research and teaching goals, and three letters of reference should be received by January 5, 1996. Correspondence should be sent to: **Allan A. Yousten, Department of Biology, Virginia Tech, Blacksburg, VA 24061-0406.** *Virginia Tech has a strong commitment to increasing the diversity of the faculty and seeks a broad spectrum of candidates including women, minorities, and people with disabilities. Persons with disabilities desiring accommodations in the application process should notify Dr. Yousten by application deadline.*

HUMAN GENETICS AT MICHIGAN

The Department of Human Genetics is seeking a **TENURE-TRACK FACULTY** member in Human/Mammalian Population Genetics and/or Quantitative Genetics. We are searching for a creative investigator who will establish an independent and productive research program. He or she will join an established department of 24 members whose research interests include molecular genetics, developmental genetics, and population genetics of both rare and common human diseases. Attractive salary compensation, generous start-up funds, and excellent research facilities are available. Please send résumé, statement of research interests, and names of three references to: **Thomas D. Gelehrter, M.D., Professor and Chair, Department of Human Genetics, M4708 MS II/0618, University of Michigan Medical School, Ann Arbor, MI 48109-0618.** *The University of Michigan is an Equal Opportunity/Affirmative Action Employer, and specifically invites and encourages minority and women applicants.*

Plant Biologist: Canisius College has a tenure-track opening for an **ASSISTANT PROFESSOR**. The ideal candidate will contribute to both our pre-professional and environmental biology curricula by offering electives such as plant biology, medicinal botany, and cell biology, and will teach in our introductory biology sequence. The development of a research program that involves undergraduates is expected. Research in plant-animal interactions would have broad appeal to our students. Send curriculum vitae, research plan, teaching philosophy, transcripts, and the names of three references to: **Dr. Paula Dehn, Chair Biology, Canisius College, Buffalo, NY 14208** by November 15, 1995. For additional information Email: Dehn@wehle.Canisius.edu; Telephone: 716-888-2555.

Biochemist: Susquehanna University invites applications for a tenure-track appointment at the **ASSISTANT PROFESSOR** level, effective September 1996. Ph.D. in biochemistry, a strong background in chemistry. Ability to teach effectively and conduct a research program with undergraduate students. Program accredited by ACS. Submit résumé, statement of research interest, transcripts, and three letters of reference by December 15, 1995: **Dr. Christopher Janzen, Department of Chemistry, Susquehanna University, Selinsgrove, PA 17870.** *Susquehanna is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply.*

POSTDOCTORAL POSITION CELL CYCLE REGULATION OF CELL MEMBRANE SYNTHESIS

Investigation of modification of the rate controlling enzyme in the pathway of phospholipid formation by regulatory kinases using contemporary techniques of molecular and cell biology. Study of phospholipase activation/signalling by growth factors and its role in cell cycle regulation of membrane synthesis and trafficking (J. Biol. Chem. 269:3858, 1994). Position available immediately and recent PhD required. Send curriculum vitae with names of three references to: **Dr. Suzane Jackowski, Department of Biochemistry, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38105. An Affirmative Action/Equal Opportunity Employer.**



MERCATOR GENETICS

TRANSLATING KNOWLEDGE INTO THERAPIES

Mercator Genetics was capitalized in the Spring of 1993 for the purpose of applying new genomic technologies to the identification of genes that cause major human diseases. The discovery of disease genes will enable the development of improved diagnostic tests which guide the use of increasingly specific therapeutic agents.

Scientists

Positions are available for scientists with a Ph.D. and Post doctoral experience in human molecular genetics, molecular biology, cell biology, or related research. Desired candidates should have expertise in all areas of genetic and positional cloning including bioinformatics, genetic mapping, cDNA library construction and screening, high-throughput genotyping, large scale automated sequencing and YAC construction.

Bioinformatics

You will lead the effort to develop the algorithms and software systems necessary to support positional cloning including sequencing, sequence analysis, gene finding, database and laboratory management systems. You will also be responsible for the supervision of company-wide systems management. Position requires a MS or Ph.D. in the sciences and an expertise in UNIX based systems with demonstrated programming skills. Experience in both computer science and biology preferred.

In addition to an exciting and challenging research environment, Mercator offers competitive salaries and benefits, an employee stock option plan and an attractive San Francisco Bay Area location. For consideration, please send resume with cover letter to: Mercator Genetics, Inc. Human Resources, 4040 Campbell Avenue, Menlo Park CA 94025. Fax: (415) 617-0883, E-Mail (ASCII only, please): personnel@mercator.com. *Equal Opportunity Employer*

EASTERN MICHIGAN UNIVERSITY

Department of Biology

Three tenure-track Assistant Professorships available Fall 1996. The department has 22 faculty with graduate program concentrations in Ecology and Organismal Biology, Molecular and Cellular Biology, Physiology, and General Biology. Successful applicants will be expected to develop a research program capable of attracting external funding, and participate in graduate programs and an emerging new undergraduate curriculum. Positions require a Ph.D., teaching experience and productive research.

Eukaryotic Molecular Geneticist (Position F9608), whose research addresses evolutionary questions. Applicants must be capable of teaching molecular genetics, introductory genetics and evolution.

Immunologist (Position F9609), capable of teaching immunology at the introductory and graduate levels, and possibly in the areas of microbiology, molecular biology, and/or virology.

Vertebrate Physiologist (Position F9610), capable of teaching introductory level courses in human anatomy and physiology, and advanced courses in his/her specialty.

Submit letter of interest, curriculum vitae, statement of teaching interests and philosophy, description of research, recent reprints, and three letters of reference by November 17 to the address below. For additional information, contact Dr. Douglas Shapiro, Department Head, Phone (313) 487-4242, Fax (313) 487-9235.

Position # (see above)

204 King Hall

Eastern Michigan University
Ypsilanti, MI 48197

Eastern Michigan University is an affirmative action/equal opportunity employer. We strongly encourage women and members of minority groups to consider these opportunities.

Make a Difference in the Quality of Life

Baxter Healthcare Corporation's Biotech Group, Hyland Division, is significantly enhancing its biopharmaceutical development and manufacture of therapeutic proteins with the opening of our new, large-scale production facility in Thousand Oaks, California.

PURIFICATION SUPERVISOR – We seek an experienced Purification Supervisor to assume responsibility for the technical and managerial aspects of the production area as it relates to operation of affinity and ion exchange chromatography columns and support systems functions. The position consists of organizing, monitoring and actually running the Purification Production area.

We require a BS/MS in Biochemistry or Biochemical Engineering, and 4 years related experience and/or training; or equivalent combination of education and experience. Pharmaceutical/biotech experience preferred. Employment is contingent upon the result of a drug screening test.

For immediate consideration, mail/FAX resume with salary history, to: **Baxter Biotech Group, Human Resources Dept., 1700 Rancho Conejo Blvd., Thousand Oaks, CA 91320. FAX: (805) 375-6810.** Equal Opportunity Employer.

Biotech Group • Hyland Division • Thousand Oaks, CA

Baxter

POSITIONS OPEN

DEPARTMENT OF CELL BIOLOGY AND ANATOMY UNIVERSITY OF ARIZONA

Applications are invited for a tenure-eligible faculty position in the Department of Cell Biology and Anatomy. Preference will be given to candidates at the **ASSISTANT PROFESSOR** level, although more senior appointments may be made for exceptional individuals. Outstanding applicants in all contemporary research areas will be considered, especially those that complement the existing strengths of the Department (cell and molecular biology, developmental biology, neurobiology, imaging). Candidates must have a Ph.D. or equivalent degree and postdoctoral experience with demonstrated ability in research. The successful candidate is expected to develop and/or maintain a vigorous, independent, extramurally funded research program and to participate in a team taught Medical Gross Anatomy course, as well as teach graduate students. To ensure consideration, applications should be received by December 1, 1995; however, applications will be accepted until the position is filled. Applicants should submit a curriculum vitae, a detailed description of present and future research goals, and names and addresses of three references to: **Dr. Clark Lantz, Chairperson, Faculty Recruitment, Department of Cell Biology and Anatomy, University of Arizona, Health Sciences Center, 1501 North Campbell Avenue, P.O. Box 245044, Tucson, AZ 85724-5044.** The University of Arizona is an Equal Opportunity/Affirmative Action/Equal Access Employer. Women and minorities are encouraged to apply.

TENURE-TRACK FACULTY POSITION University of Missouri-Columbia

The University of Missouri-Columbia (MU) seeks a tenure-track **ASSISTANT, ASSOCIATE, or FULL** Professor to be jointly appointed in the colleges of Veterinary Medicine and Agriculture, Food and Natural Resources. The successful candidate will be expected to lead an outstanding independent research program in an area of cell or structural biology of importance to basic biomedical aspects of veterinary medicine and agriculture, teach electron microscopy at the graduate level, and direct (at 20% effort) a recently established, campus-wide Electron Microscopy Core Facility under the auspices of the MU Molecular Biology Program. Experience in both plant and animal systems is preferred, but not required; postdoctoral experience is necessary. Applicants should submit, by January 31, 1996, a description of research plans, curriculum vitae, selected reprints, and names, Email addresses, and telephone/FAX numbers of three professional references to: **Dr. Margaret A. Miller, Co-chair, Cell Ultrastructure Faculty Search Committee, UMC Veterinary Medical Diagnostic Laboratory, P.O. Box 6023, Columbia, MO 65205. Telephone: 314-882-6811; FAX: 314-884-7544; Email: miller@vmdl.missouri.edu.** The University of Missouri-Columbia is an Affirmative Action/Equal Opportunity/American Disabilities Act Institution. Women and members of minority groups are especially encouraged to apply.

FACULTY POSITION IN BACTERIAL PATHOGENESIS

The Department of Microbiology at the College of Physicians and Surgeons of Columbia University is soliciting applications for a tenure-track faculty position at the level of **ASSISTANT PROFESSOR**. Applicants should have a strong background in prokaryotic genetics and experience in an area related to the interaction of pathogens with host cells. Applicants should have demonstrated a high level of academic achievement and the potential for developing an active research program. The Department has an active graduate program, supported by a training grant, and all faculty are expected to maintain a strong commitment to graduate education. Substantial start-up resources are available. Interested individuals should send a curriculum vitae and a statement of research interests and should also arrange to have three letters of reference sent to: **The Microbiology Search Committee, Department of Microbiology, College of Physicians and Surgeons, Columbia University, 701 West 168th Street, New York, NY 10032. Email: horan@cumbib.bmb.columbia.edu.**

Columbia University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

FACULTY POSITION Microbiology/Microbial Pathogenesis

The Department of Microbiology of The University of Texas Health Science Center at San Antonio invites applications for several **TENURE-TRACK** faculty positions that will be filled at the junior to senior levels. The department is especially interested in recruiting individuals whose research program will focus on aspects of microbial pathogenesis, host-pathogen interactions and inflammation. However, outstanding applicants in all areas of microbial molecular biology are encouraged to apply. Applicants should mail curriculum vitae, a statement of current and future research goals, and arrange to send three letters of reference by January 24, 1996 to: **Dr. Joel B. Baseman, Professor and Chair, Department of Microbiology, The University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78284-7758.** The University of Texas Health Science Center at San Antonio is an Equal Employment Opportunity/Affirmative Action Employer.

YORK UNIVERSITY

Department of Psychology in the Faculty of Arts invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level in Perception. Of particular interest are candidates with expertise in the area of the psychophysics of spatial vision, motion perception or colour vision and the applications of basic research to human performance. Duties include teaching in both the undergraduate and graduate programs. Candidates should have a promising publication record and program of research. Enquiries and applications, with curriculum vitae, three letters of reference, and relevant reprints, should be directed to: **Prof. Sandra Pyke, Chair, Department of Psychology, Faculty of Arts, York University, North York, Ontario M3J 1P3, Canada.** Deadline for applications is December 15, 1995. York University is implementing a policy of employment equity, including Affirmative Action for women faculty. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. All positions at York University are subject to budget approval.

UNIVERSITY OF CALIFORNIA LOS ANGELES INORGANIC FACULTY POSITION

The Department of Chemistry and Biochemistry of the University of California, Los Angeles intends to make a tenure-track faculty appointment in inorganic chemistry at the **ASSISTANT PROFESSOR** level. Applicants with interests in any area of inorganic chemistry will be considered. Candidates must give evidence of potential distinction in scholarship and teaching. Applications should include a curriculum vitae, a description of proposed research not exceeding four pages, and letters of recommendation from at least three professional references. Applications should be completed no later than December 15, 1995 and directed to: **Chair, Inorganic Search Committee, Department of Chemistry and Biochemistry, University of California, Los Angeles, CA 90095-1569. FAX: 310-206-9130.** The University of California is an Equal Opportunity Employer and encourages applications from women and minority candidates.

MICROBIOLOGY POSITION—The University of Mississippi Department of Biology seeks an **ASSISTANT PROFESSOR** (nine-month, tenure-track) beginning fall 1996. A Ph.D. with emphasis in microbiology and publications in peer-reviewed journals is required. University-level teaching experience desirable. Duties include teaching undergraduate courses and graduate courses in the area of specialty. Peer-reviewed publications and the development of an extramurally funded research program involving graduate students is expected. Candidates with research experience in physiological, ecological, molecular, or immunological aspects of disease are preferred. Send curriculum vitae, letter of teaching and research interests, names, telephone numbers, and addresses of four references to: **Dr. Al Mikell, Chair, Microbiology Search Committee, Department of Biology, University of Mississippi, University, MS 38677. Telephone: 601-232-7204 Before 31 December 1995.** The University of Mississippi is an Affirmative Action/American with Disabilities Act/Equal Opportunity Employer.

POSITIONS OPEN

LECTURER/ACADEMIC COORDINATOR POSITION IN CHEMISTRY

Applications are invited for the position of **LECTURER/ACADEMIC COORDINATOR** in the Department of Chemistry beginning in the spring of 1996, pending budgetary approval. Duties of the position are the experimental reorganization and supervision of the freshman chemistry laboratory, recitation and training of graduate student instructors. A doctoral degree in chemistry and previous teaching experience in chemistry are prerequisites. The nine-month salary is \$28,600 to \$36,000, depending on experience, with the possibility of additional income for summer school teaching. The appointment is for one year with possible reappointment for three additional one-year terms, depending on good performance. Apply to: **Chair, Lecturer Recruiting (No. 65), Department of Chemistry, University of California, Berkeley, CA 94720-1460.** The deadline for receipt of applications is December 15, 1995. The University of California is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSORSHIP Animal Developmental Biologist

The Waksman Institute at Rutgers, The State University of New Jersey, is inviting applications for a **TENURE-TRACK POSITION**. The position is a joint appointment in the Department of Microbiology and Genetics and requires teaching at the graduate and undergraduate level. Applicants should submit a curriculum vitae, list of publications, three letters of reference, and a summary of research plans to: **Dr. Ruth Steward, Search Committee Chairperson, Waksman Institute, Rutgers, The State University of New Jersey, Box 759, Piscataway, NJ 08855-0759.** Rutgers University is an Affirmative Action/Equal Opportunity Employer.

NEW HEALTH EVALUATIONS SCIENCES DEPARTMENT

The University of Virginia School of Medicine is establishing a new health evaluation sciences department devoted to the discovery and development of new approaches to and uses of patient description, prognosis, clinical, and genetic risk assessment, information transfer, medical practice and research strategies. The department's efforts will enable clinicians, administrators, and others to more precisely evaluate the efficacy of existing medical practice and more accurately test new approaches.

We are now seeking talented and innovative leaders in the fields of biostatistics, clinical trial design, clinical epidemiology, health services research, outcomes evaluation, medical decision-making, and clinical informatics to help create an integrated clinical research and development department. All efforts will be closely aligned with clinical and basic science research and educational initiatives at UVA.

The department has widespread support within the School of Medicine, Medical Center and University. A number of full-time, **TENURE-TRACK** positions are available for clinicians and investigators at all academic levels. Newly renovated space, equipment, research associates, and secretarial support are provided. Individuals with academic or industrial expertise are invited to send cover letter and curriculum vitae to:

William A. Knaus, M.D., Evelyn Troup Hobson Professor and Chair, University of Virginia School of Medicine, Box 600, Charlottesville, VA 22908.

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

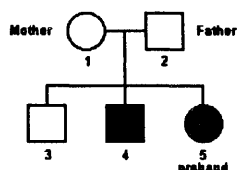
ANIMAL PHYSIOLOGIST

Tenure-track **ASSISTANT PROFESSOR** of Biology begin fall 1996. Ability to stimulate student interest, direct undergraduate research, interact with diverse student population. Master's degree required, Ph.D. preferred. Teaching responsibilities include vertebrate physiology, cell and molecular biology, advanced courses in areas of the candidate's interest. Research interest should include application of molecular techniques to organismal biology. Application deadline December 15, 1995. Send letter of interest, résumé, brief statement of teaching and research interests, and telephone numbers or Email addresses of three references to: **Dr. Norval Kneten, Dean, Science and Humanities, Texas Wesleyan University, 1201 Wesleyan Street, Fort Worth, TX 76105-1536.** Affirmative Action/Equal Opportunity Employer.

HBDI

THE HUMAN BIOLOGICAL DATA INTERCHANGE

A Genetic Resource for Diabetes Research
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- A Repository of Cell Lines, DNA and clinical information (HLA and autoantibody testing) from 241 Multiplex Families with unaffected and affected siblings with IDDM
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Philadelphia, PA 19103

SCIENTIST

DNA sequence analysis software development

Seeking individual with extensive experience developing software for the analysis of DNA sequence data, including alignment, structure, probe design, and genetic database search algorithms. Must have experience with all of the following: UNIX network system management, SUN OS, C programming and Macintosh. Additional training in Molecular Biology through Life Science degree or research experience preferred. Familiarity with several commercially available DNA sequence analysis programs is desirable. BS, MS, or PhD in Computer Science, Life Science, or Chemistry with at least 5 years' experience in DNA sequence analysis also required.

BIOSTATISTICIAN

Candidate must have 1-3 years' experience with design and data analysis for clinical trials. Experience with statistical software packages such as SAS®. Selected individual will develop statistical software programs as appropriate and statistical portions of clinical protocols, perform data entry and analysis using appropriate statistical and graphical methods. Current knowledge of FDA requirements for statistical design and data analysis for clinical trials essential. MS or PhD in Statistics, Applied Statistics, Math, or MPH in Epidemiology with Statistics emphasis also required.

STAFF SCIENTISTS

DNA probe-based assay development

Seeking individuals with a proven track record developing diagnostic products employing either nucleic acid or immunoassay technologies. 5-10 years' experience in assay development with MS or PhD in Life Sciences or Chemistry required.

Gen-Probe offers an exciting work environment, excellent benefits and competitive salaries. Please send your resume to: GEN-PROBE INCORPORATED, Box 5-1020, 9880 Campus Point Dr., San Diego, CA 92121. Gen-Probe supports a drug-free work environment. We are an Equal Opportunity Employer.



SYMPOSIUM

Stem Cells, Lineage, and Plasticity of the Differentiated State

Sponsored by
Cutaneous Biology Research Center
Massachusetts General Hospital/Harvard

9am - 5pm

Friday May 17, 1996

Armed Services YMCA (adjacent to Building 149)
Charlestown Navy Yard
Charlestown MA

Scheduled Speakers:

Nicole M. Le Douarin

Embryogenesis: Stem Cells, Lineage and Plasticity
Institut d' Embryologie Cellulaire Ctr Moleculaire du
CRNS Nogent-sur-Marne Cedex, France

Elizabeth J. Robertson

Zygotes, Embryos and Embryonal Carcinomas.
Department of Cellular and Developmental Biology
Harvard University

Irving L. Weissman

Development of the Hematolymphoid System
from Stem Cells
Department of Pathology & Developmental Biology
Stanford University School of Medicine

Katia Georgopoulos

Development of the Immune System:
Stem Cells and Lineages
Cutaneous Biology Research Center
Massachusetts General Hospital/Harvard

Jeremy Brockes

Amphibian Limb Regeneration:
Plasticity or Stem Cells?
Ludwig Cancer Research Institute, London, England

Frank E. Stockdale

Muscle Development: Plasticity or Stem Cells?
Department of Medicine
Stanford University Medical Center

Elaine V. Fuchs

Development of the Epidermis:
Stem cells or fixed lineages?
Department Molecular Genetics and Cell Biology
University of Chicago

Andrew P. McMahon

Development of the Nervous System:
Stem cells, Lineage or Plasticity?
Department of Cellular and Developmental Biology
Harvard University

Open to the Public. Additional information to follow.

POSITIONS OPEN

STATISTICAL/POPULATION GENETICIST

The Medical University of South Carolina (MUSC) offers a tenure-track position as **ASSISTANT** or **ASSOCIATE PROFESSOR** with co-appointment in the Department of Medicine (Division of Endocrinology, Diabetes, and Medical Genetics) and the Department of Biometry and Epidemiology. The ideal candidate will have a Ph.D. or M.D. degree and an established research program in statistical or population genetics related to human disease with or without an involvement in molecular genetics. He or she would maintain an independent research program and participate in ongoing activities at MUSC, notably the genetic epidemiology of diseases affecting African-Americans. The candidate will be invited to participate in the development of a world-class family registry for positional cloning of diabetes and obesity genes, in linkage analyses and study design, and in genetic epidemiology components complementing other large population-based studies. Send curriculum vitae, statement of research interests, and references to either co-chair of the search committee: **Dr. Tim Garvey, Director, Division of Endocrinology, Diabetes, and Medical Genetics, Telephone: 803-792-2529; FAX: 803-792-4114; Email: tim_garvey@musc.edu**, or **Dr. David Hoel, Chair, Department of Biometry and Epidemiology, Telephone: 803-792-2262; FAX: 803-792-1123; Email: david_hoel@musc.edu**, MUSC, 171 Ashley Avenue, Charleston, SC 29425. *Equal Opportunity/Affirmative Action Employer.*

MICROBIOLOGY LABORATORY COORDINATOR

Microbiology Laboratory **COORDINATOR** sought for the Department of Biology at Texas A&M University. Applicants should have a Ph.D. in Microbiology or related discipline, experience in modern laboratory techniques, and a commitment to undergraduate education. The position will involve lecturing in introductory microbiology and directing undergraduate microbiology laboratories. Opportunities will exist for extensive interaction with both faculty and students, for designing new laboratory exercises, for participation in course development, and for establishing contacts with potential employers of students graduating with B.S. degrees in Microbiology. The Department also supports active research and seminar programs in various areas of microbiology. The salary will be competitive and commensurate with experience. Please send a curriculum vitae and three letters of reference by December 1, 1995, to: **Craig Nessler, Department of Biology, Texas A&M University, College Station, TX 77843-3258. Texas A&M is an Equal Opportunity Employer.**

ACOS/EDUCATION—Albuquerque VA Medical Center (VAMC) and University of New Mexico School of Medicine. Responsible for development, coordination, and evaluation of educational programs for health professionals, physicians, trainees, employees, and patients. Minimum requirements: M.D. or Ph.D., directly related experience, eligibility for **FACULTY** appointment at Associate/Professor level in appropriate Department; good communication skills. VA experience desirable. Although applications will be considered until position is filled, selection process will begin on December 15, 1995. Position subject to random drug testing per Federal law. Send cover letter, curriculum vitae, and names of three references to: **Judith A. Fabian, M.D., Chief, Anesthesiology Service, VAMC (112F), 2100 Ridgcrest Drive, SE, Albuquerque, NM 87108. Affirmative Action/Equal Opportunity Employer.**

DIRECTOR TRANSGENIC MOUSE CORE FACILITY

The University of Chicago is seeking a **RESEARCH SCIENTIST** to direct a transgenic mouse core facility used by a diverse group of investigators. Appropriate background and training required. Experience with ES cell technology preferable. Send curriculum vitae with names and addresses of three references to:

**Kenneth S. Polonsky, M.D.
The University of Chicago
MC 1027
5845 South Maryland Avenue
Chicago, IL 60637**

POSITIONS OPEN

Tenure-track position at the **ASSISTANT PROFESSOR** 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 that 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. Review of applications will begin 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, WI 53706-1532. The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.**

BIOLOGY FACULTY LAKE FOREST COLLEGE

A continuing appointment as **ASSISTANT PROFESSOR** is anticipated (subject to administrative approval) beginning August 1996 for a highly qualified Ph.D. interested in teaching and conducting research with undergraduates in a liberal arts environment. Teaching will include the majors' core course in genetics plus advanced and/or non-major courses to complement research interests. Research plans should engage undergraduates in publishable investigations of current questions in areas such as developmental biology, neurobiology, or immunology. Modern research facilities and start-up funds are available. Postdoctoral experience is preferred. A letter stating teaching and research plans, curriculum vitae, and three letters of reference should be sent by December 1, 1995 to: **Dr. David W. Towle, Chairperson, Department of Biology, Lake Forest College, Lake Forest, Illinois 60045. Email: towle@lfc.edu. Applications from minorities and women are actively encouraged.**

VERTEBRATE BIOLOGIST/ECOLOGIST

The Department of Biology of Carroll College, a coeducational, small, Catholic, liberal arts college, invites applications for a full-time (academic year), tenure-track **ASSISTANT PROFESSOR** beginning fall 1996. Ph.D. is required. Teaching responsibilities include Ecology, Comparative Anatomy, Life Science for non-majors, and a portion of a team-taught Introductory Biology course for majors. Candidates should be committed to undergraduate teaching with high academic standards, research and thesis programs and student advising. Aggressive grant seeking and research not required. Send cover letter, curriculum vitae, transcripts, and three letters of recommendation by December 1, 1995 to: **Dr. Bruce Busby, Academic Vice President, Carroll College, 1601 North Benton Avenue, Helena, MT 59625-0002. Equal Employment Opportunity.**

UNIVERSITY OF MASSACHUSETTS AMHERST

College of Natural Sciences and Mathematics, Department of Biology. **SENIOR POSTDOCTORAL POSITION** available. An opening is available immediately for an experienced researcher to assume a leading role in a small group studying structure/function relationships of nuclei and chromatin with emphasis on conformational changes that accompany regulatory events. Candidates should have a thorough background and extensive experience in one or more of the following areas: nucleic-acid protein interactions, electron microscopy and image processing, chromatin molecular biology. This position does not provide benefits. Competitive salary commensurate with background and experience. Send curriculum vitae, statement of experience and research goals, and names, addresses, and telephone numbers of three references to: **Dr. Chris Woodcock, Biology Department, University of Massachusetts, Amherst, MA 01003. Telephone: 413-545-2825; FAX: 413-545-1696; Email: chris@bio.umass.edu.** To ensure full consideration, applications should be received by December 1, 1995. Applications will continue to be received after this date and the search will remain open until a successful candidate is identified. *The University of Massachusetts Amherst is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT PROFESSORSHIP

The Waksman Institute and the Department of Microbiology and Genetics of Rutgers, The State University of New Jersey, invite applications and nominations for a **TENURE-TRACK** faculty position in Protein Chemistry, Protein-Protein Interaction, and Combinatorial Chemistry.

We seek individuals interested in analysis of protein-protein and protein-nucleic acid complexes of biological significance, including recombination, replication, transcription, and translation complexes. We seek individuals with demonstrated ability and commitment to conduct research, to teach at the undergraduate and graduate levels, and to assume other usual academic responsibilities.

The successful candidate will join a multidisciplinary group of investigators in the study of biomolecular structure, function, and design. Salary and rank will be commensurate with experience, background, and professional qualifications.

Applications should include an expression of interest in the position, a current publication list, a curriculum vitae, and confidential letters of recommendation from four professional references. Applications will be accepted until the position is filled. Applications and nominations may be directed to: **Professor Richard H. Ebright, Chairman, Protein Chemistry Search Committee, Waksman Institute, Rutgers, The State University of New Jersey, P.O. Box 759, Piscataway, NJ 08855-0759.**

Rutgers University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL OPPORTUNITY

An exciting new gene therapy company is seeking an energetic and talented individual to work on signal transduction pathways that are modulated by adenovirus. Candidates should have a Ph.D. in molecular biology or related fields. This position offers competitive salary and benefit package. Interested individuals should send a résumé and the names of three references to:

**GenVec, Inc.
Human Resources
Attn: JB
12111 Parklawn Drive
Rockville, MD 20852**

An Equal Opportunity Employer.

Two **POSTDOCTORAL POSITIONS** available immediately. Position 1) To study opioid receptors and cellular signal transduction mechanisms. Experience in cellular electrophysiology (intracellular recording and/or patch clamp techniques) required. Position 2) To study opioid receptor functions in animal models. Experience in animal behavioral testing and/or psychopharmacology desired. Both positions offer opportunities to incorporate multi-disciplinary approaches to study the actions of opioids. Send curriculum vitae, summary of research interests, and names, addresses and telephone numbers of three references to: **Dr. L. Yu, Department of Medical and Molecular Genetics, Indiana University School of Medicine, Indianapolis, IN 46202. Email: igcm100@indycms.iupui.edu. Equal Opportunity Employer.**

POSTDOCTORAL POSITION available to study cell cycle-dependent (and damaged DNA-induced) regulation of eukaryotic DNA replication. A recent Ph.D. degree with experience in molecular biology and/or biochemistry (nucleic acid enzymology in particular) is preferred. Please send a curriculum vitae, research experience, and names of three references to: **Dr. Suk-Hee Lee, Department of Virology and Molecular Biology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38105. FAX: 901-523-2622. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION

POSTDOCTORAL POSITION is available immediately to study male germ cell genetic modification (*Proc. Natl. Acad. Sci. USA*, 91: 11298; 11303). Experience in molecular biology is required. Send curriculum vitae, names of three references, and a letter describing research skills and interests to: **R. I. Brinster, School of Veterinary Medicine, University of Pennsylvania, 3850 Baltimore Avenue, Philadelphia, PA 19104.**



Position Announcement

BIOLOGY, ASSISTANT PROFESSOR. The Department of Biology at Shippensburg University invites applications for a tenure-track position starting August 1996. The successful candidate will be required to have completed an earned doctorate at the time of appointment. Primary teaching responsibilities will include the non-majors' courses Problems of the Environment, Basic Biology, and Introduction to Ecology. The successful candidate will also occasionally teach Ecology and/or Field Zoology for biology majors. A strong commitment to undergraduate teaching is required. Active learning and multimedia instructional skills preferred. Scholarly activity will be required in the area of the candidate's specialty. Applicants should send curriculum vitae, copies of transcripts (both graduate and undergraduate), a statement of teaching philosophy and research interests, plus the names, addresses and telephone numbers of three references to: **Michael R. Marshall, Chair of the Search Committee, Department of Biology, Shippensburg University, 1871 Old Main Drive, Shippensburg, PA 17257-2299.** Receipt deadline for application materials is January 15, 1996. *Shippensburg University is committed to equal employment opportunity. Women, persons of color, veterans, and the disabled are encouraged to apply.*

Postdoctoral Position Cell & Molecular Biology

A postdoctoral position is available immediately for studies investigating mechanisms of estrogen-dependent transcriptional regulation and growth control in human mammary and ovarian cells. The successful candidate will carry out research to elucidate the function of a novel, estrogen-regulated zinc-finger protein. Experience in molecular biology and cell culture is desirable.

As a US subsidiary of an international Fortune 500 company, Berlex offers an exciting research environment and a competitive two-year fellowship stipend. Our facility is located in the San Francisco Bay Area. For immediate consideration, send your Curriculum Vitae, research summary, and the names, addresses, and telephone numbers of three references, to: **BERLEX, HUMAN RESOURCES EMPLOYMENT, 15049 SAN PABLO AVE., Dept. PDF, RICHMOND, CA 94804-0099.** EOE.

BERLEX

POSTDOCTORAL FELLOWSHIPS at the WOODS HOLE OCEANOGRAPHIC INSTITUTION

Applied Ocean Physics & Engineering
Biology, Marine Chemistry & Geochemistry
Marine Geology & Geophysics
Physical Oceanography

Applications are invited from new or recent doctorates in the fields of biology, molecular biology, microbiology, chemistry, engineering, geology, geophysics, mathematics, meteorology and physics, as well as oceanography. Recipients of awards are selected on a competitive basis, with primary emphasis placed on research promise.

Fellowships are awarded for 12-18 month appointments with a stipend of \$36,000 per year, plus group health insurance and a modest research budget. Recipients are encouraged to pursue their own research interest in association with resident staff. Completed applications must be received by **January 16, 1996** for the 1996-97 awards. Awards will be announced in March. Write for application forms to: **Dean of Graduate Studies, MS #31, P.O. Box 5, Woods Hole Oceanographic Institution, Woods Hole, MA 02543-1541.** Or call (508) 457-2000, ext. 2200 or Email lcampbell@whoi.edu.

WOODS HOLE
OCEANOGRAPHIC
INSTITUTION



An equal opportunity/affirmative action employer.

New York University Faculty Position Department of Biology

The NYU Department of Biology is undergoing a program of expansion and development. Twelve faculty have been added in the past 5 years. A senior position is currently available (subject to final budgetary approval), in the area of cellular and molecular physiology. Outstanding candidates in other areas will also be considered. Candidates are expected to have active, externally-funded research programs and to participate in the department's teaching activities at both the undergraduate and graduate levels. The department offers an excellent research environment with a strong molecular focus, substantial start-up packages and modern laboratory facilities. Application letter with curriculum vitae and three letters of reference should be sent to: **Chairman of the Search Committee, Department of Biology, New York University, 1009 Main Building, Washington Square, New York, NY 10003.**

NYU encourages applications from women and members of minority groups.

SCIENTISTS IN DRUG METABOLISM

The Department of Drug Metabolism at Merck Research Laboratories has openings for two highly motivated BS/MS biologists/pharmacologists/animal scientists who are interested in pursuing a career in drug metabolism and supporting the team effort in drug discovery and development.

The positions require a BS/MS or equivalent in biology/pharmacology/animal science (or a related field) with at least three years of research experience. Successful candidates will be responsible for conducting the in-life phase of metabolism studies in rodents and in other laboratory animals (e.g., dog, non-human primates). Candidates should have excellent skills in handling small animals and in performing established surgical procedures (e.g., vein cannulation, bile-duct cannulation) for metabolism or pharmacological studies. The knowledge of handling radiolabeled chemicals and GLP requirements in conducting scientific experiments is desirable but not essential. A working knowledge in drug metabolism is highly desirable.

Merck Research Laboratories are located in Rahway, NJ, approximately 25 miles from New York City. Our salaries, benefits and growth potential are excellent. For consideration, send your resume, with the names of three references to **Merck Research Laboratories, Human Resources, Ad #168, P.O. Box 2000, RY80A-3, Rahway, NJ 07065.** EOE/AA/VH/Employer.



MERCK
Research Laboratories

POSITIONS OPEN

A position as a **POSTDOCTORAL FELLOW** is now available in a children's cancer center. Applicants must have a Ph.D. in a life science and previous experience with the following techniques: cloning and manipulation of DNA fragments into bacterial and/or yeast plasmids; PCR; RT-PCR; isolation of DNA; RNA and protein for subsequent analysis with Northern, Southern, and Western blotting; eukaryotic tissue culture and transfection techniques; experience with the use of radioactive isotopes; familiarity with either PC or MAC computer systems. Experience in molecular virology is also desired. Please send curriculum vitae and three reference letters to: **Dr. Judith Margolin, Baylor College of Medicine, 6221 Fannin, MC 3-3320, Houston, TX 77030.** Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer.

POSTDOCTORAL POSITION available immediately to investigate the molecular physiology of normal and disease-causing mutant cystic fibrosis transmembrane conductance regulator (CFTR) chloride channels in intracellular membranes. Studies will utilize digital imaging of single living cells and single-channel patch clamp electrophysiology of native endoplasmic reticulum using novel approaches. Requires Ph.D. or M.D. and electrophysiology, imaging or molecular biology experience. Ability to work independently within group with strengths in ion transport and molecular biology. Send or FAX curriculum vitae, a short statement of research interests and names of three references to: **Dr. J. Kevin Foskett, Director, Ion Transport Core, Institute for Human Gene Therapy and Department of Physiology, University of Pennsylvania School of Medicine, BRB-1, 422 Curie Boulevard, Room 313, Philadelphia, PA 19104-6069. FAX: 215-573-8590.** The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

POSITIONS OPEN

RESEARCH FELLOW OR TECHNOLOGIST PREIMPLANTATION GENETICS

This position involves biomedical research and its clinical application in the area of preimplantation genetic diagnosis. The techniques to be used are tissue culture, multi-color-multiprobe-FISH, PCR, RT-PCR, micromanipulation of gametes and embryos, and cytogenetics. A degree in biology and two years of experience in molecular cytogenetics research are preferred. Previous knowledge of embryology not necessary but a plus. The position is located in Livingston, New Jersey (30 minutes from Manhattan). To apply send résumé and two reference letters to: **Santiago Munné, Director of Preimplantation Genetics, The Center for Reproductive Medicine and Science of Saint Barnabas, 101 Old Short Hills Road, Suite 501, West Orange (Livingston), NJ 07052.**

POSTDOCTORAL POSITION Transcription and Leukemogenesis

An NIH-funded position is available to apply molecular biology and cell culture methods to study the AML1 transcription factor and its leukemic variants in myeloid differentiation and leukemogenesis—see *Mol. Cell. Biol.* **14**: 5558, 1994. Send curriculum vitae and names of references to: **Dr. Alan Friedman, Johns Hopkins Oncology Center, Room 3-109, 600 North Wolfe Street, Baltimore, MD 21287. FAX: 410-955-8897.** Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION

University of California and Veterans Administration Medical Center (VAMC), San Francisco, has a position available immediately for a qualified individual to join a group studying the impact of microgravity and skeletal unloading on bone growth and differentiation. Applicants should have a Ph.D. in the biological sciences, be experienced with cellular and molecular techniques, and be willing and able to work with rodents. Please send curriculum vitae and names of three references to: **Daniel Bikle, M.D., Ph.D., Department of Medicine, VAMC (111N), 4150 Clement St., San Francisco, CA 94121.**

POSITIONS OPEN

POSTDOCTORAL POSITION

A **POSTDOCTORAL POSITION** is available for a recent graduate to investigate the biochemical and genetic mechanisms of radiation-induced apoptosis. Knowledge in one or more of the following techniques a must: DNA, RNA gel electrophoresis, southern and northern blotting, PCR, immunoprecipitation and western blotting. Send or fax curriculum vitae, names of three references, and short statement of research interests to: **Dr. Michael Story, Department of Experimental Radiotherapy-66, U. T. M. D. Anderson Cancer Center, 1515 Holcombe Boulevard, Houston, TX 77030.** An Equal Opportunity/Affirmative Action Employer. Smoke-free environment.

POSTDOCTORAL FELLOWSHIP available to study the regulation and biosynthesis of alginate, an exopolysaccharide produced by the phytopathogenic bacterium, *Pseudomonas syringae*. Experience in molecular biology is required; experience in protein purification is also desirable. This project is a collaboration between **Dr. C. Bender, Oklahoma State University (OSU),** and **Dr. A. Chakrabarty, University of Illinois at Chicago (UIC).** Résumés to: **Dr. C. Bender, 110 Noble Research Center, OSU, Stillwater, OK 74078-3032. FAX: 405-744-7373; Email: CBENDER@VMS.UCC.OKSTATE.EDU.** OSU and UIC are Equal Opportunity/Affirmative Action Employers.

RESEARCH ASSOCIATE position available in a program focused on immunology of human melanoma with emphasis on immunotherapy. Background in molecular immunology required to participate in a program to analyze HLA antigen expression by melanoma cells, to develop new types of immunogens for immunotherapy and/or analyze patient's immune response. Send curriculum vitae, names of three references to: **Dr. S. Ferrone, Department of Microbiology and Immunology, New York Medical College, Valhalla, NY 10595.**

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"Diversity and the Scientific Community"

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Space Reservation deadline: 24 October

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RESEARCH & DEVELOPMENT SENIOR SCIENTIST Genetic Analysis

Promega Corporation, a world-leading biotechnology company, headquartered in Madison, WI, has an opening for a Senior Research & Development Scientist in Genetic Analysis. Requirements include: Ph.D. in molecular biology or related area and minimum 5 years lab experience. Prefer 2+ years experience in an industrial setting; experience with nucleic acid purification and amplification methods, linkage analysis and/or non-isotopic detection methods; experience handling plant, animal, clinical or forensic materials; and facility with computer-based analyses, especially national genome databases and DNA analysis software.

Promega strives to provide a rewarding work experience for our employees and to provide unparalleled excellence, quality and prosperity in our business. We seek to preserve a balance between work and life activities reflected in our on-site fitness and daycare facilities and comprehensive benefit package. To apply, send a resume with salary requirements to: **PROMEGA CORPORATION, Human Resources (11104J), P.O. Box 7879, Madison, WI 53707-7879**. Equal Opportunity Employer.



Promega

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inside IMMULOGIC

Fall 95:

With the financial strength and resources of a well-established organization, Immulogic is making its presence felt in the biopharmaceutical community. Through a series of strategic moves, we've strengthened and streamlined our organization. We've solidified our joint development and commercialization agreement with Hoechst Marion, Roussel, Inc., by signing a letter of agreement for the joint manufacture of ALLERVAX® products. We've also formed a partnership with Schering AG, Germany to develop and market a peptide based multiple sclerosis product. Above all, we've successfully brought the first two products in our ALLERVAX® family of allergy therapeutics to late stage clinical programs. Watch for updates, and more exciting career opportunities as we build on our momentum and move closer to commercialization.

Director - Immunology

In this key position, you will manage and organize our immunology group directing research leading to a definition of T-Cell epitope based products for allergic and autoimmune diseases. Specifically, you will lead a research group to elucidate the mechanism of tolerance induction and the regulation of cytokine synthesis. You will perform administrative and research responsibilities and supervise a minimum of 10 researchers. Requires a Ph.D. in Immunology or a related field and a minimum of 12-15 years' experience. Demonstrated excellence in scientific research in immunology is required.

As part of our growing team, you'll enjoy a wide array of professional and personal advantages — from our competitive salary, equity and benefits package, to our entrepreneurial environment. Please send your resume to: **Human Resources, ImmuLogic Pharmaceutical Corporation, 610 Lincoln Street, Waltham, MA 02154**. An equal opportunity employer. Principals.

IMMULOGIC
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SCIENTISTS/ SR. SCIENTISTS DRUG DISCOVERY RESEARCH

The R. W. Johnson Pharmaceutical Research Institute conducts research in a number of therapeutic areas including anti-infectives, CNS, dermatology, hematology/oncology, immunology/inflammation, and women's health for the Johnson & Johnson companies: Cilag, Ortho-McNeil Pharmaceutical, Ortho Biotech and Ortho Dermatological. We have immediate openings for two Scientists/Sr. Scientists at our campus-like facilities in CENTRAL NEW JERSEY (midway between New York City and Philadelphia). Excellent communication and interpersonal skills are required to work effectively as members of multi-disciplinary research teams.

Reproductive Medicine

The successful candidate will have a Ph.D. in Biochemistry, Pharmacology, Reproductive Endocrinology or related discipline and at least 2 years of postdoctoral training demonstrating skills in reproductive physiology, receptor biology/signal transduction, cell/tissue culture, molecular biological techniques and small-animal handling. Assay development skills required. Experience in immunocytochemistry and *in situ* hybridization is a plus.

Your primary responsibilities will include the design, execution and analysis of experiments to identify and characterize novel therapeutic targets (and their biological/biochemical responses) in endocrine-related disease states. You will also assist in the development of assays for the evaluation of lead compounds. (Dept. 504)

Drug Metabolism

The successful candidate will have a Ph.D. or equivalent, knowledge of immunoassays, and 3+ years of experience performing progressively advanced research. 7+ years' experience, including postdoctoral, required to qualify at the Senior Scientist level.

Responsibilities include assay development, implementation and documentation to support pharmacokinetics studies. In-depth experience is required in RIAs, ELISAs, immunological and other analytical techniques for analysis of proteins/peptides in biological matrices. (Dept. 505)

We offer competitive salaries and excellent benefits, including medical/dental insurance, 401(k) plan and our LIVE FOR LIFE Wellness Program with on-site fitness center. Please forward a copy of your resume, including salary requirements, suitable for scanning into our database (i.e., clean/clear, no graphics, and preferably unfolded) to: Dept. # indicated above for the position of your interest, Johnson & Johnson Recruiting, P. O. Box 16597, New Brunswick, NJ 08906-6597.

We are an equal opportunity employer and support diversity in the workplace.



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PHARMACEUTICAL RESEARCH INSTITUTE
a Johnson & Johnson company

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately to study novel amplified genes in human tumors. Techniques being utilized include microdissection, PCR amplification, fluorescent in situ hybridization (FISH), as well as routine molecular biological techniques. This project includes collaboration with members of the Human Genome Project at The University of Texas Health Science Center at San Antonio. Required: Ph.D. with strong background in molecular biology. Experience with cytogenetics and FISH preferable. Send curriculum vitae, description of research training and experience, and names and addresses of three references to: **S. Gail Eckhardt, M.D., c/o Personnel Department, Cancer Therapy and Research Center, 8122 Datapoint Drive, Suite 600, San Antonio, TX 78229. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION

Available January 1, 1996, at the J. David Gladstone Institute of Cardiovascular Disease in the laboratory of **Dr. Robert V. Farese, Jr.**, to study cellular cholesterol metabolism using a molecular and genetic approach. Methodology involves gene manipulation in mice and cell biology of sterol metabolism. Ph.D. or M.D./Ph.D. with experience in molecular/cellular biology required. Please send curriculum vitae and names of three references to: **HR-C95-062, Gladstone Institutes, P. O. Box 419100, San Francisco, CA 94141. FAX: 415-826-3708. Equal Opportunity Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE Environmental Chemist position beginning 1 January 1996, renewable annually pending availability of funds. Experience with GC using FID, PID, ECD, and ELCD detectors. Proficiency with an HP 5890 mass spec and RTE operating system a plus. Salary range \$32,000 to \$36,000. By 30 November 1995, send curriculum vitae, statement of research interests, and names, addresses, and telephone numbers of five references to: **Dr. Stephen A. Bortone, Institute for Coastal and Estuarine Research, University of West Florida, Pensacola, FL 32514. Telephone: 904-474-3251; FAX: 904-474-3130; Email: sbortone@castaway.cc.uwf.edu. University of West Florida is an Equal Opportunity/Access/Affirmative Action Employer.**

POSTDOCTORAL MICROBIOLOGIST

USDA, Agricultural Research Service (ARS), National Animal Disease Center (NADC), Ames, Iowa, has an opening for a **MICROBIOLOGIST** to study molecular biology of pseudorabies virus. Candidate will investigate mechanisms of herpesvirus latency. Ph.D. degree required. Appointment is for two years and includes benefits. Salary commensurate with experience (\$35,578 to \$42,641 per annum). Send curriculum vitae and names of three references to: **Andrew Cheung, USDA, ARS, NADC, P. O. Box 70, Ames, IA 50010. Telephone: 515-239-8324; FAX: 515-239-8458. Applications in response to this advertisement should be marked 5N035. Applications accepted until position is filled. USDA/ARS is an Equal Opportunity Employer.**

POSTDOCTORAL POSITION University of Pennsylvania School of Medicine

Position available to study cell cycle control of cellular division. Specific areas of study include the control of chromosome segregation using a *Xenopus*-extract based *in vitro* system. Qualified individuals should possess a Ph.D. and have a strong background in biochemistry and experience with molecular biology.

We offer a competitive salary and an excellent benefits package. Send curriculum vitae, research interests and background, and the names and telephone numbers of three references to: **University of Pennsylvania School of Medicine, Attn: Dr. Sandra L. Holloway, 713a Stellar Chance (BRB1), 422 Curie Boulevard, Philadelphia, PA 19104-6069. Equal Opportunity Employer.**

POSTDOCTORAL POSITION to study the molecular immunology of human red blood cell antibodies. Cellular and recombinant phage display approaches are utilized to express antibodies and to develop novel inhibitory peptidomimetics. Applicants should send a curriculum vitae and three references to: **Dr. Don L. Siegel, Room 207, J. Morgan Building, University of Pennsylvania, Philadelphia, PA 19104-6082. Email: siegeld@mail.med.upenn.edu. University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN



RESEARCH ASSOCIATE—The USDA, Agricultural Research Service (ARS), is seeking a candidate to work on wheat molecular biology and transformation. Candidate to join a project working to bioengineer wheat characteristics and to improve wheat transformation technology. Experience in molecular biology and plant tissue culture desired. Position is a temporary two-year appointment with full benefits. Salary range is \$37,087 to \$44,450, commensurate with qualifications. Send letter and curriculum vitae to: **Dr. Olin D. Anderson, USDA, ARS, WRRRC, 800 Buchanan Street, Albany, CA 94710. Telephone: 510-559-5773; Email: oanderson@pw.usda.gov. Position is open until filled. The USDA is an Equal Opportunity Employer.**

ASSOCIATE SCIENTIST AND POSTDOCTORAL POSITIONS

To work in the laboratory of **Dr. Kenneth M. Baker**, on G-protein receptor mediated cellular growth and the role of tyrosine phosphorylation in this process. Emphasis will be placed on the angiotensin II (type AT_{1A}) receptor in cardiovascular cells and stably transfected cell lines, to define the mechanisms of coupling to JAK-STAT and other signaling pathways and the importance of these events in gene regulation and cellular growth. Other areas of investigation include the molecular regulation of angiotensin receptors and of renin-angiotensin system genes in cardiac cells. A Ph.D. and/or M.D. is required with a background and experience in biochemistry, molecular and cellular biology. Salary will be commensurate with education and experience. Send letter of interest along with curriculum vitae and three letters of reference to: **Geisinger Human Resources (KMB), 100 North Academy Avenue, Danville, PA 17822-1529. Equal Opportunity Employer. Minority/Female/Disabled/Veteran.**

POSTDOCTORAL POSITION IMMUNOLOGY

Position available immediately to study the maternal reproductive tract T lymphocyte biology in normal and abnormal pregnancy in a murine model. Position suited to a recently graduated postdoctoral fellow with a strong interest in cellular and molecular immunology. Animal work involved. Unique setting in a private research setting with NIH funding. Please send a curriculum vitae, a brief letter of research interests, and three reference letters to: **Kent D. Heyborne, M.D., Swedish Medical Center, 501 East Hampden Avenue, Englewood, CO 80110.**

SENIOR RESEARCH ASSOCIATE

The City of Hope invites applications for a position to manage a transgenic mouse facility for research programs at the NCI-Designated City of Hope Cancer Center and Beckman Research Institute. The facility is associated with a research laboratory with substantial experience in the techniques. Work involves (1) microinjection of fertilized ova with DNA, injection of blastocysts with embryonic stem cells, surgical techniques of ova transfer, and (2) culture of embryonic stem cells, involving routine maintenance, transfection with DNA, and picking and freezing of recombinant clones. Significant previous experience in (1) is essential, a Ph.D. is not essential. This position will be working in **Dr. Jeff Mann's** lab, Division of Biology, Beckman Research Institute of the City of Hope. Submit application, with curriculum vitae and three addresses for letters of reference, to: **City of Hope, Human Resources, Attn: JM, 1500 East Duarte Road, Duarte, CA 91010-3000. FAX: 818-301-8448; Email: jyasmminch@smtlink.com.ho.org. Equal Opportunity Employer.**

SENIOR RESEARCH ASSOCIATE

The Department of Neurology, Columbia University College of Physicians and Surgeons, seeks a **SENIOR RESEARCH ASSOCIATE** to assist in laboratory work in neurogenetics. Responsibilities will include DNA sequencing and sequence analysis, mutation analysis, RNA and protein extraction and assay. M.D. or Ph.D. required, with at least three years of postdoctoral experience in the necessary techniques. Send curriculum vitae to: **Torbjoern G. Nygaard, M.D., Department of Neurology, Columbia University, 710 West 168th Street, New York, NY 10032.**

Columbia University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITIONS
Roswell Park Cancer Institute
Department of Human Genetics
with Thomas B. Shows, Ph.D. and
Pieter J. de Jong, Ph.D.

Positions available for Ph.D./M.D. in human genome research including projects involving: efficient construction of sequence ready clone sets; analysis of conserved repetitive DNA; application of recombination-based cleavage methods for chromosome analysis and genome manipulation; transcript mapping; positional cloning of disease loci; sequencing the genome; and improvements in large-insert cloning technology.

Experience in molecular genetic and genome technology is required. Please send curriculum vitae, a description of your research experience and future interests, and names and telephone numbers of three references to: **Chair, Department of Human Genetics, Roswell Park Cancer Institute, Buffalo, NY 14263. Roswell Park is a Minority/Female/Disabled/Veteran Affirmative Action Employer.**



TECHNICAL SUPPORT REPRESENTATIVE

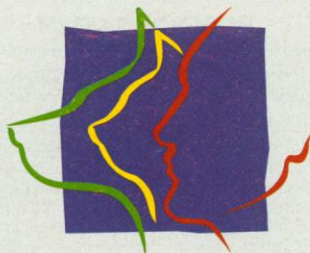
The Genetics Computer Group, Inc. (GCG) is seeking an additional member for its technical support staff to provide assistance to the world-wide community of biologists that use the GCG Wisconsin Sequence Analysis Package. The ideal candidate will have an advanced degree in molecular biology/biochemistry or related field, computer experience, and strong interpersonal and communication skills. Familiarity with the Wisconsin Sequence Analysis Package will be an advantage. Salary is negotiable. GCG offers a full range of benefits and help with relocation costs if applicable. For more information visit GCG's homepage at: <http://www.gcg.com>. Send curriculum vitae with references to: **Genetics Computer Group, Inc., 575 Science Drive, Madison, WI 53711. Telephone: 608-231-5200. Genetics Computer Group, Inc. is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION available to participate in studies on the structure, function and regulation of components of signal transduction pathways. Prefer applicants with experience in molecular cloning and recombinant DNA techniques. Send curriculum vitae to: **Dr. Zahi Damuni, Associate Professor, Department of Cellular and Molecular Physiology, The Pennsylvania State University College of Medicine, 500 University Drive, Hershey, PA 17033. Telephone: 717-531-4195; FAX: 717-531-7667. For your health, Hershey Medical Center is a smoke-free campus. We are an Equal Opportunity/Affirmative Action Employer and encourage minority and female applicants to apply.**

POSTDOCTORAL POSITION available. The NIH National Center for Human Genome Research has a position available in the Laboratory of Genetic Disease Research under the supervision of **Dr. Leslie Blesecker**. The successful applicant will study the molecular genetics of Proteus syndrome and related disorders. Please contact **Dr. Blesecker** by Telephone: 301-402-2041; FAX: 301-402-2170; Email: leslieb@helix.nih.gov; or post: 49 Convent Drive, MSC 4470, Bethesda, MD 20892. The NIH is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

POSTDOCTORAL POSITION available for mechanistic studies of DNA helicases using transient kinetics (stopped-flow, quenched-flow), biochemical and biophysical approaches. Send curriculum vitae and have three letters of reference sent to: **Prof. Timothy M. Lohman, Biochemistry and Molecular Biophysics, Washington University School of Medicine, Box 8231, 660 South Euclid Avenue, St. Louis, MO 63110.**

POSTDOCTORAL POSITION available to carry out the sequencing, analysis, and expression of genes associated with polyketide antibiotic biosynthesis in *Streptomyces*. Previous experience with molecular biology required; previous experience with *Streptomyces* highly desirable. Send curriculum vitae and the names and telephone numbers of three references to: **Professor Ronald Parry, Department of Chemistry, Rice University, P. O. Box 1892, Houston, TX 77251.**



"Support actions in the area of research and information in favour of Animal Health, with a view to improving Man's Health and Environment."

RESEARCH GRANTS

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All qualified groups or individuals are invited to submit applications for research grants to undertake basic or applied medical and veterinary research in the field of:

- New vaccines or new methods of vaccination within the framework of infectious and transmissible diseases aiming to benefit both human beings and animals.

Particular attention will be given to projects displaying positive impact on the environment and developing countries, clear and economically acceptable objectives, and collaboration between **Veterinary and Human Research**.

A minimum of two Grants of \$ U.S. 25,000 each will be awarded for one year, beginning in June 1996.

The deadline for submission of your proposal is January 31, 1996.

Orientation Committee

Fondation Pierre Richard Dick - Virbac


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PLEASE CONTACT US QUICKLY FOR AN APPLICATION FORM

POSTDOCTORAL POSITIONS

APOPTOSIS AND CELL ADHESION RESEARCH

 Astra is a pharmaceutical company in a phase of rapid growth. The company's operations, which are highly international, consist in research, production and marketing of pharmaceuticals through subsidiaries, agents and licensees all over the world. The number of employees is about 14,400, of whom 5,300 in Sweden. Sales in 1994 amounted to SEK 28 bn (USD 3.65 bn).

ASTRA ARCUS AB

Astra Arcus, a research company in the Astra Group, is engaged in R & D in primarily two areas – CNS and Infection. Astra Arcus employs some 430 people and the company is located in Södertälje, Sweden, 35 kilometres south of Stockholm.

Two postdoctoral research positions are immediately available for studies on apoptosis and cell adhesion in relation to neuroimmunological diseases. Both positions are at the department of Immunology, Preclinical R&D, Astra Arcus AB, Sweden.

Suggested topics of apoptosis research are:

- regulation of apoptosis in autoreactive T lymphocytes
- importance of organ-specific survival factors
- pathology of apoptotic mechanisms

A suggested topic of cell adhesion research is to investigate the importance of integrins in relation to neurodegenerative disorders.

The postdoctoral positions will work in a team of researchers engaged in explorative research in the field of neurodegenerative disorders. Your work will be related to newly initiated projects and provide opportunities for a creative individual. Collaboration with external academic groups as well as publication of results is encouraged. The offered positions are for 2 years.

Further information can be obtained from Dr. Carl Harald Janson and Dr. Kjell Stenberg, +46 8 553 273 47 and +46 8 553 260 93; fax +46 8 553 270 60.

We would like your application with curriculum vitae before November 10, 1995 to Astra Arcus AB, Human Resources, Louise Bergman, S-151 85 Södertälje, Sweden.



POSITIONS OPEN



POSTDOCTORAL ASSOCIATE McLAUGHLIN RESEARCH INSTITUTE

POSTDOCTORAL POSITIONS are available to study the molecular genetics of molecular motors, using the mouse as a model system. MRI is an expanding basic research institute that is devoted to the mouse as an experimental model. The Institute consists of highly interactive research groups housed in a new building with state-of-the-art transgenic and gene targeting facilities. Send curriculum vitae with names and addresses of three references to:

John A. Mercer, Ph.D.
McLaughlin Research Institute
1520 23rd Street South
Great Falls, MT 59405

Email: umbjm@gemini.oscs.montana.edu

An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION VASCULAR BIOLOGY- SMOOTH MUSCLE CELL CYCLE

Available immediately to investigate transgenic models of smooth muscle proliferation and altered differentiation, with additional laboratory emphasis on local gene delivery. Research involves the mechanisms of smooth muscle cell cycle control *in vitro* and *in vivo*. Other studies in the laboratory involve local placement of vascular cell-modulating genes to create "local transgenic" models. Prior experience in molecular biology is desired. Competitive stipend and an opportunity to make important contributions are available. Contact: Keith L. March, M.D., Ph.D., Krannert Institute of Cardiology, 1111 West 10th Street, Indianapolis, IN 46202-4800. Telephone: 317-630-8257; FAX: 317-274-9697; Email: march@kimail.dmed.iupui.edu.

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 cytotoxicity 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. Jack 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@accr.uams.edu. Affirmative Action/Equal Opportunity Employer.

PROTEIN BIOCHEMISTRY

A **POSTDOCTORAL POSITION** is available for the preparation, modification, and crystallization of a variety of motor and structural proteins. Enzymology background helpful. The successful candidate would work closely with a group of protein crystallographers. Training in protein crystallization (as well as other aspects of structure determination, if desired) would be provided. Send curriculum vitae and three reference letters to: Dr. C. Cohen, Rosenstiel Basic Medical Sciences Research Center, Brandeis University, Waltham, MA 02254-9110. FAX: 617-736-2419; Email: ccohen@binah.cc.brandeis.edu.

POSTDOCTORAL POSITIONS IN MOLECULAR AND CELLULAR BIOLOGY

To study the bombesin-like peptides (BLP). Projects include: 1) Cloning and characterization of bombesin-like peptide receptors; 2) Characterization of new mammalian bombesin-like peptides; 3) Characterization of the role of BLP in fetal monkey lung development. Methods include a mix of molecular biology, protein purification and *in vivo* physiologic models. Send curriculum vitae and names of three references to: Eliot Spindel, M.D., Ph.D., Division of Neuroscience, Oregon Regional Primate Research Center, 505 NW 185th Avenue, Beaverton, OR 97006. Equal Opportunity Employer.

POSITIONS OPEN

GRADUATE STUDENT FELLOWSHIPS IGPP/UCLA

The Institute of Geophysics and Planetary Physics (IGPP) at UCLA invites applications for **GRADUATE FELLOWSHIPS** for 1996-1997, two to be awarded in each of three centers of excellence: Center for the Physics and Chemistry of the Planets; Center for Earth System Research; and the Space Science Center.

In addition to support provided fellows by UCLA Departments, IGPP will grant each fellow a stipend of \$5,000 for the first year of graduate study, with no teaching or other duties. Stipends may be used for any purpose the fellow deems appropriate: travel, books, computers, etc. Fellows are included in a select group of graduate students invited to interact with IGPP faculty in weekly seminars and luncheons.

Applicants should plan to carry out doctoral research under the direction of an IGPP faculty member. Faculty are members of the UCLA Departments of Earth and Space Sciences, Chemistry and Biochemistry, Atmospheric Sciences, Physics and Astronomy, Mathematics, and the Molecular Biology Institute.

Fellowship applicants must apply by 15 January 1996 to IGPP. Applicants must also apply to an appropriate academic department for admission to UCLA.

For application forms and a list of IGPP members, contact: IGPP Fellows Committee, 3845 Slichter Hall, UCLA, Los Angeles, CA 90095-1567.

For further information please telephone 310-825-1580.

UCLA is an Equal Opportunity Affirmative Action Employer.

POSTDOCTORAL POSITIONS Structural Basis of Neurobiology

Postdoctoral positions are available on a training grant in Neurobiology based in the Department of Anatomy and Neurobiology at Boston University School of Medicine. The training, in an active research environment, is designed to strengthen the trainees' knowledge of the structural and functional organization of the nervous system. Training is carried out under the direction of one of the eighteen participating faculty members, who have a wide range of interests.

For further information please contact:

Dr. Alan Peters
Department of Anatomy and Neurobiology
Boston University School of Medicine
80 East Concord Street
Boston, MA 02118
Telephone: 617-638-4200
FAX: 617-638-4216

Boston University is an Equal Opportunity/Affirmative Action Employer.

A **POSTDOCTORAL POSITION** is available in bacteriophage genetics to study the takeover of E. coli by T4 phage, using a multidisciplinary approach. This virus has now been completely sequenced; the goal of this project is to identify and characterize the products of genes predicted to alter host metabolism, and their host targets. Applicants should possess a related Ph.D. degree and broad and extensive experience with bacterial viruses and molecular biology techniques, including DNA sequencing, cloning and expression of host-lethal genes, and purification and biochemical characterization of proteins. We are looking for someone with the desire and ability to work closely with undergraduate students. Review of applications begins November 1, 1995, and will continue until finalists are chosen. For detailed job announcement Telephone: 360-866-6000 x6361. Submit curriculum vitae and names of three references to: Dr. James Neitzel, Lab 1, The Evergreen State College, Olympia, WA 98505. FAX: 360-866-6794; Email: neitzelj@elwha.evergreen.edu. The Evergreen State College is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS available to study genes that determine the yeast replicative life span, their human homologs and age-responsive promoter elements (*Genetica*, 91:35, 1993; *J. Biol. Chem.*, 269:15451, 1994; *J. Biol. Chem.*, 269:18638, 1994). Experience in molecular techniques essential and in yeast genetics helpful. Send curriculum vitae with bibliography and names, telephone and fax numbers of three references to: Dr. S. Michal Jazwinski, Department of Biochemistry and Molecular Biology, Louisiana State University Medical Center, 1901 Perdido Street, New Orleans, LA 70112. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION Molecular Cytogenetic Studies of Prostate Cancer

An immediate position is available to characterize specific molecular genetic and molecular cytogenetic alterations important for the initiation and progression of prostate carcinoma. The position is funded for one year with potential for extension into a second year. Potential studies include chromosomal deletion mapping by *in situ* hybridization and loss of heterozygosity analysis, DNA mutation screening and sequencing, and somatic cell genetic experiments. A strong background in molecular genetics and/or molecular cytogenetics is desirable. Applicants should mail or FAX their curriculum vitae and the names and FAX numbers of three qualified references to: Dr. Robert B. Jenkins, Division of Laboratory Genetics, Mayo Clinic, 200 First Street SW, Rochester, MN 55905. FAX: 507-284-0043. Applications will be accepted until October 30, 1995.

A **POSTDOCTORAL POSITION** is available to conduct a protein structure and function analysis of a site-specific DNA endonuclease. Research project will include isolation of mutant alleles using genetic techniques and characterization of mutant proteins. Strong background in biochemistry and molecular biology required. Send curriculum vitae and three letters of recommendation to: Dr. F. Gimble, Institute of Biosciences and Technology, Texas A&M University, 2121 West Holcombe Boulevard, Houston, TX 77030. Affirmative Action/Equal Employment Opportunity Employer.

PRE- AND POSTDOCTORAL FELLOWSHIPS MOLECULAR PARASITOLOGY

The Molecular Parasitology Training Program in the Division of Biological Sciences, University of Georgia has immediate openings for **PRE- AND POSTDOCTORAL FELLOWS** with an interest in the Molecular and Cell Biology of Parasites and Vectors. This NIH-sponsored program offers training in parasitology with emphasis in the areas of molecular biology, biochemistry, immunology, cell biology, and vector biology. With a staff of 20 faculty participants from the University of Georgia and the Centers for Disease Control, this program combines the expertise of classical and modern parasitologists and immunoparasitologists with that of molecular biologists, cell biologists, and biochemists to provide comprehensive and modern training in molecular parasitology. Funding is restricted to U.S. citizens or permanent residents. For further information contact: Molecular Parasitology Training Program, Department of Cellular Biology, University of Georgia, Athens, GA 30602. The University of Georgia is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIP/RESEARCH INSTRUCTOR positions available in two laboratories: Mark Boothby, M.D., Ph.D.: Transcription and signal transduction factors involved in lymphocyte differentiation and responses to IL-4; IL-4 related transgenes. Geraldine Miller, M.D.: FGF function and signaling in transplantation, vascular disease, and autoimmunity. Experience in molecular biology required. Background in immunology or signal transduction desirable. Please address statement of interests, curriculum vitae, and references to the investigator: Dr. Mark Boothby, Department of Microbiology and Immunology, Vanderbilt University, Nashville, TN 37232-2363. Dr. Geraldine Miller, Department of Medicine, Vanderbilt University, Nashville, TN 37232-2605. Email: millergg@ctr.vanderbilt.edu.

Biotech company in Ventura, California seeks experienced professionals for the following positions: **Clinical Database Specialist**. Provide clinical data review/development/implementation of EDDS system into data review workflow—requires knowledge of clinical trials process/clinical terminology. SQL DB experience, biological science or computer science degree, two plus years of experience in clinical data management or biotech company. **Safety Assistant**. Take adverse event information via telephone, enter data into DB, assist with MGDF and BDNF projects, must be RN with nephrology or acute disorders experience. **Clinical Records Coordinator**. Initiate study specific CRIC and CARS DB. Process clinical documents into "CARS" system, provide CRIC document inventory reports, handle "Special Processing Issues"/Clinical Trials Conduct, familiar with relational DB applications. **United Staffing Service**, 325 Rolling Oaks Drive, Suite 105, Thousand Oaks, CA 91361. Contact Monicaur Barbara. Telephone: 805-371-8100; FAX: 805-494-6763.

Department of Biological Sciences

CHAIR IN PROTEIN STRUCTURE STUDIES

Applications are invited for this newly established Chair, available now, to lead a new Research Group working on the determination of high resolution protein structure using X-ray diffraction, within the context of addressing important biological questions. The Department has built a strong research base in virology, microbiology, plant biochemistry and in animal developmental biology – with a focus on molecular biology, cell biology and biochemistry, and has recently set up Research Groups in Ecosystems Analysis and in Molecular Medicine.

Salary will be within the Professorial Range, minimum £31,999 pa.

Informal enquiries are welcome and may be made to Professor M.A. McCrae (Tel: 01203 523524; Fax: 01203 523568; e-mail: malcolm@dna.bio.warwick.ac.uk).

Further particulars can be obtained from the Personnel Office, University of Warwick, Coventry CV4 7AL (01203 523627) quoting Ref. No. 10/A/95 (please mark clearly on envelope). Closing date: 30th November 1995.



UNIVERSITY OF WARWICK

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Request for Proposals From The International Spinal Research Trust

The ISRT is a grant giving charity (number 281325) with the purpose of funding research aimed at resolving the non or partial functioning of the injured spinal cord.

The field of spinal cord repair has developed to the stage at which we now have demonstrable regeneration of damaged nerve fibres in the adult mammalian cord. This represents a truly great advance that is the foundation of all our research and, even more importantly, the associated technologies that will help us progress are now maturing. Accordingly we feel that we have sufficient knowledge to plan a research strategy which will guarantee genuine progress. At the moment, we can only look to phase one of a strategic programme, but we are confident that this will take us forward to a second phase where we can begin to address how to take the work on to the clinic.

To reach this point it is recommended that ISRT funding is, from now on, restricted to projects that are conducted in adult mammalian spinal cord and concentrated on 3 main research foci:

- **early trauma and inflammation:** prevention of the generation of obstacles to future regenerative repair, including aspects of scarring
- **trophic stimulation of neurite outgrowth:** identification of the pattern and possible temporal cascade of the different factors required to achieve long-distance regeneration
- **CNS inhibitory molecules:** masking of intrinsic mechanisms that are inhibitory to axonal regrowth in the CNS

Besides these three main foci, ISRT will support a complementary programme to address the hurdles that prevent a proper evaluation of the progress made on each project.

- **A programme to develop underpinning technologies.** The development of assessment models: both behavioural models and models that closely mimic the lesion in man.

- **Education and communication.** Educating young scientists in relevant technologies and encouraging exchange visits between laboratories.

The Trust does not, at this time, have the resources to begin every aspect of this three year programme. Accordingly applications are invited for projects focusing on the **early trauma and inflammation**. Applicants should submit a letter of intent (c. two sides) summarising the proposed research and background of the laboratory. An approximate budget and the curriculum vitae of the Principal Investigator(s) should be appended. Awards will average up to £250,000 over three years and, following a preliminary review, detailed proposals will be requested from a limited number of applicants. Deadline for letters of intent is 30th November 1995. Successful applicants will be approached by ISRT for detailed plans.

Address letters of intent to: The International Spinal Research Trust, Unit 7 Bramley Business Centre, Station Road, Bramley, Guildford, Surrey GU5 0AZ



BERGEN UNIVERSITY RESEARCH FOUNDATION

DIRECTOR

MOLECULAR MARINE BIOLOGY LABORATORY

The Bergen University Research Foundation is seeking an outstanding scientist as director of a new Molecular Marine Biology Laboratory at the Bergen High Technology Centre.

The Molecular Marine Biology Laboratory is part of an initiative taken by the Research Council of Norway to strengthen basic marine research and will conduct research oriented towards marine organisms and their interaction with their environment. The research programmes should therefore include Molecular Marine Ecology and Molecular and Cell Biology of Marine Organisms with the following topics as possible research areas; Interactions between microorganisms, and between microorganisms and higher taxa; Development of the immune system; Responses of organisms to environmental signals; Differentiation and developmental biology; Reproductive biology; Production of beneficial chemicals and toxins from the marine environment; Description of ecosystems in the polar environment.

It will be a top priority to recruit an international scientific staff and initiate new research networks within molecule marine biology and marine biotechnology. The Molecular Marine Biology Laboratory will be part of a Large Scale Facility for marine research funded by the European Union 4. framework programme for training and mobility of researchers. Grants will be available to cover travel, subsistence and user fees for visiting scientists.

The research activities will be organized in separate research groups or programmes. Laboratory core facilities including access to special laboratories for research on aquatic organisms will be available January 1996. Selection of group leaders, research programmes and installation of necessary scientific equipment is planned to start during the first half of 1996. Funding will be available to start three to four research groups in 1996. The laboratory may house a maximum staff of 80 with a core staff of 40 including group leaders.

The director will be in charge of the work to establish the Molecular Marine Biology Laboratory. The director will also, in collaboration with a Scientific Advisory Committee, coordinate the scientific programme and select group leaders. The appointee may include own research activities in the research programme as a director's group. The laboratory will be organized as a division of the Bergen University Research Foundation with a separate administrative staff and board of directors. The director will initially be engaged for a period of six years. The engagement may be prolonged for a maximum of three years. Salary will be negotiable.

Deadline for applications is 20 November 1995.

For further information please contact

Research advisor Ivar Lossius, e-mail: ivar.lossius@fa.uib.no or Fax: +47 5558 4981, Tel: +47 5598 4995

To apply please send your CV quoting ref.no. 93/2629, to:

Liv-Grethe Gudmundsen
Bergen University Research Foundation
SEP-Section for Project Services
Professor Keyzers gt.8

KUWAIT UNIVERSITY
Faculty of Science

Faculty of Science at Kuwait University seeks qualified candidates in Botany and Microbiology (Plant fine structure and Anatomy, Phycology (Marine Botany), Plant Ecology (vegetation Ecology), Plant Physiology (growth hormones and regulators) with a strong commitment to high quality teaching and research for appointment at the positions of Associate Professor and Assistant Professor.

Required Qualifications:

- Ph.D. or its equivalent, in the required area
- Research experience and publications
- University teaching experience
- Excellent knowledge of English

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- TAX FREE Salary
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- Fringe benefits which include: furnished air-conditioned accommodation, annual air tickets, free National Health Medical Care, paid mid-term holidays and summer vacations and gratuity.
- New appointees can apply for financial support for research projects.
- Excellent academic environment.
- Contracts effective from September, 1996, for a two year initial period

Application should be accompanied by:

- A complete C.V, including: Mailing address including phone, fax, and e-mail. Academic qualifications, teaching, research and professional/work experience, and list of publications in professional journals.
- Names and addresses of three persons well-acquainted with the academic and professional work of the applicant.
- An English translation of all documents in other languages should be enclosed.
- For appointment to the position of Assistant Professor, a very good performance in the B.Sc. is required (minimum GPA 3 points out of 4). Please send copies of all transcripts.

Applications should be sent by express mail/courier service to:

The Dean, Faculty of Science
Kuwait University, P.O. Box 5969
Safat, 13060, KUWAIT

For inquiries use:

Fax: (965) 4847054 or (965) 4836127

E-Mail: AZZA@KUCOI.KUNIV.EDU.KW.

Closing date for receipt of applications: November 30, 1995.

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SCIENCE
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University of Kuwait
Faculty of Medicine
HEALTH SCIENCE CENTER

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Applications are being accepted for the following appointments in the Faculty of Medicine:

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 Protein Biochemist(s)
 Membrane Biochemist(s)
 Endocrinology oriented Biochemist

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Professor/Associate Professor/Assistant Professor
 Social Psychologist
 Environmental & Occupational Health
 (Applicants should hold an M.D. as well as a Ph.D. or Dr.P.H. degree in Occupational/ Environmental Health or Occupational/ Environmental Epidemiology.
 Minimum of two year's teaching as well as research experience is required.)

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Professor/Associate Professor/Assistant Professor
 Therapeutic
 Clinical Haematology
 Infectious Diseases
 Respiratory Medicine

NUCLEAR MEDICINE:

Professor/Associate Professor/Assistant Professor
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Associate Professor	- Perinatal Medicine & Gynecological Urology
Assistant Professor	- Obstetrics & Gynecology

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 Pediatric Neurology
 Pediatric Nephrology
 Pediatric Allergy & Clinical Immunology
 Pulmonary Medicine
 Pediatric Critical Care Medicine
 Neonatologist
 Emergency Medicine
 Pediatric Cardiology
 Clinical Genetics

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 General Practitioner
 (MRGCP or equivalent, knowledge of Arabic language will be an advantage)

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(interest in X-ray mammography and breast cancer, and/or MRI imaging and/or Interventional Radiology will be an added recommendation)

SURGERY:

Professor	- Vascular Surgery
Professor	- Transplant
Professor/Associate/Assistant	- General Surgery
Professor/Associate	- Orthopaedics
Professor/Assistant	- Urology
Professor/Assistant	- Anaesthesia

REQUIREMENTS FOR APPOINTMENT:

Qualifications: Applicants should possess a Ph.D. or an equivalent high professional qualification, i.e. FRCS/MRCP/MRCOG/MRCPATH/MD/American Board in their respective specialty and have conducted and published research in their field. Professors should have at least 14 years experience, 4 as an Associate Professor or its equivalent. Associate Professors should have at least 9 years experience, 4 as an Assistant Professor or its equivalent.

Benefits:

Conference attendance. Gratuity. Furnished accommodation (electricity and water free of charge). Free medical treatment in Kuwait. Free annual round trip air tickets from country of citizenship or permanent residence for self and family, up to three dependent children. Baggage and freight allowance. Education fees for maximum three children in Kuwait from elementary through high school. No taxation. Currency is transferable without restriction. 60 days paid annual leave.

Method of Application:

Curriculum vitae in duplicate which should include the names of three referees; personal particulars; qualifications with dates, career history with dates, teaching experience, research accomplishments and, where appropriate, clinical experience, should arrive no later than November 30th, 1995 to:

The Vice-Dean Administration (Recruitment Office)
Faculty of Medicine
Kuwait University
P.O. Box 24923
13110 Safat, KUWAIT
or Fax: 965 531 8454

Cell Biologist
Department of Biological Sciences
Dartmouth College

The Department of Biological Sciences at Dartmouth College seeks applicants for a tenure track position at the level of Assistant Professor. We expect the successful candidate to establish and supervise an independent research program that will attract extramural funding and provide research training for graduate and undergraduate students. The successful applicant will join a group of faculty whose research involves cellular, genetic, and biochemical approaches to studying problems in a number of model systems. Candidates should have a Ph.D., (or equivalent,) and at least two years of relevant postdoctoral experience. Candidates should expect to participate in teaching cell biology or biochemistry to undergraduates as well as a graduate course in their area of research specialization.

Please send a current curriculum vitae, a statement of research and teaching interests, and arrange to have three letters of reference sent under separate cover to:

Cell Biologist Search Committee
Department of Biological Sciences
Dartmouth College
6044 Gilman Hall
Hanover, NH 03755-3576

Although materials can be submitted by FAX (603-646-1347), please note that the original documents are ultimately required. Application review will begin on December 1, 1995. Women and members of minority groups are strongly encouraged to apply.

Dartmouth College is an Equal Opportunity/Affirmative Action Employer.



Director, Clinical Pathology Unit
Institute for Human Gene Therapy

University of Pennsylvania

The Institute for Human Gene Therapy, at the University of Pennsylvania as an opportunity for an individual to direct a service and research laboratory involved in histopathology, morphology, and assays of immune function. This person will have proven scientific and management skills, strong supervisory skills, and the ability to assist and advise investigators and researchers in the development of projects involving analysis of tissues by immunocytochemistry. Responsibilities include supporting toxicology studies under GLP as well as basic research, developing new technologies in cellular analysis of gene expression, and managing full laboratory staff. Qualifications include a Ph.D. in biologic sciences, three to five years of research experience with two to four years supervisory experience. We offer a competitive salary and a comprehensive flexible benefits package including health and dental coverage. For consideration send resume to **James M. Wilson, M.D., Ph.D., Institute for Human Gene Therapy, University of Pennsylvania Health System, 640 Maloney, 3400 Spruce Street, Philadelphia, PA 19104-4283.**



The University of New Mexico
 Health Sciences Center

MOLECULAR
IMMUNOLOGIST/BIOLOGIST

Research Associate

The University of New Mexico Health Sciences Center, Epidemiology and Cancer Control Program and the Department of Cell Biology has an immediate opening for a Research Associate II to investigate the molecular basis of human papillomavirus (HPV) persistence. Of current interest are the elucidation of specific HLA risk/protective mechanisms of HPV 16-associated disease progression, investigations of direct immunological knockout/mimicry, and general immune response phenomenon. Required: Recent Ph.D. in the biological sciences and one year of directly related experience. Experience in molecular and immunologic techniques including work with cell culture, nucleic acids, and proteins. Training in recombinant DNA technology and protein purification. Position is dependent upon grant funding which is currently available for two years with possible continuation. This position is in the laboratory of Dr. Cosette Wheeler at the UNM Cancer Center. To apply send a curriculum vitae and cover letter of interest with reference to requisition number 956050B, to the **Human Resources Office at the Health Sciences Center, Med. Bldg. 2, University of New Mexico Health Sciences Center, Albuquerque, NM, 87131, before 5 pm on 10 January 1996.** *The University of New Mexico is an Affirmative Action/Equal Opportunity Employer and Educator.*

GLOBAL CAREER OPPORTUNITIES

UNIVERSITY OF GLASGOW

Department of Medical Genetics
POST-DOCTORAL
RESEARCH POSITIONS

Two post-doctoral positions are available to study the involvement of TGFβ and its receptors in early mammalian development, specifically in primitive haematopoiesis and vasculogenesis. The approaches taken will be extensive molecular developmental analysis of existent. TGFβ1 knock out mice (*Development* 121, 1845-1854, 1995), and the generation and analysis of TGFβ receptor transgenic mice using a binary tetracycline-inducible system. Applicants should be experienced in post-implantation murine embryology, transgenic mouse production and analysis, or be expert molecular biologists familiar with gene transfer and expression technology. They would join an established group of 10 people working on related projects.

The posts are both funded by the MRC, one post available for 16 months and one post available for 3 years) and salaries would be on the RA1A scale, dependent on age and experience.

Applications, in the form of a full CV, with the addresses and telephone numbers of three referees, should be sent to Dr. Rosemary Akhurst, Department of Medical Genetics, Glasgow University, Royal Hospital for Sick Children, Yorkhill, Glasgow G3 8SJ. Tel: 0141-201-0365; Fax 0141-357-4277; email gpva06@udcf.gla.ac.uk. Closing date for applications: 1st December 1995. Ref: 8936/S. An equal opportunities employer.

The University of Glasgow is an exempt charity dedicated to excellence in teaching and research.

Middle East
Desalination Research Centre

An institution conceived in the context of the Middle East Multilateral Peace Process

The Governments of the United States of America and the Sultanate of Oman on behalf of the Water Resources Working Group of the Multilateral Phase of the Middle East Peace Process seek qualified candidates for the position of

Centre Director

to lead a process of institutional development

Located in Muscat, Sultanate of Oman, the Centre is a new establishment, created by the Multilateral Working Group on Water Resources of the Middle East Peace Process. Its mission is to conduct, facilitate, coordinate, and support state-of-the-art basic and applied research, including training and educational programmes, and encourage the sharing of relevant information through electronic networking, with special emphasis on the needs of the Middle East region. The particular concern of the Centre will be desalination issues.

The Centre Director will have overall executive responsibility for the institutional development and day to day running of the Centre and will be accountable directly to the Board of Governors.

Since the Centre is an entirely new project, it is essential that its first director should have the vision and energy to establish its profile internationally, and to secure lasting financial support for its activity.

The Centre Director should certainly possess:

- proven management and leadership skills
- experience of institutional development in a developing nation context,
- verbal and written communication skills in English,
- certain expertise in the field of water treatment or process engineering.

Salary will be commensurate with experience. A generous benefits and relocation package will also be provided.

Suitably qualified candidates should forward their curriculum vitae and letter of interest stating their motivation for applying for this position to: **Science, Box 62, 1333 H Street NW, Room 814, Washington, DC 20005**

The deadline for receipt for all replies is December 31, 1995.

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HARVARD MEDICAL SCHOOL HUMAN GENE THERAPY

Two **POSTDOCTORAL POSITIONS** to develop anti-tumor chimeric IgTCR-modified T cells for therapy. 1) Excellent molecular biology skills and/or retroviral vector experience. 2) Expertise in immunology and (optimally) mouse models; medical, veterinary or pathology background a plus. Send résumé, description of prior research, and names of at least two references by **FAX: 617-632-0998** to: **R. P. Junghans, Ph.D., M.D., Director, Biotherapeutics Development Lab.**

FELLOWSHIP IN EXPERIMENTAL NEURO-ONCOLOGY

Two one to two year **FELLOWSHIPS** in Experimental Neuro-Oncology are offered for qualified M.D., Ph.D., and M.D./Ph.D. applicants interested in a research career in Neuro-Oncology. Individuals will work with and in the laboratory of a specific scientist within the Neuro-Oncology Program of the Mayo Comprehensive Cancer Center, Rochester, Minnesota. The areas of potential investigation include, but are not limited to, signal transduction, molecular genetics, developmental pharmacology, and experimental epidemiology. Interested individuals should send copies of their curriculum vitae and bibliography and two letters of reference to: **B. P. O'Neill, M.D., Department of Neurology, Mayo Clinic, 200 First Street SW, Rochester, MN 55905.** Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.

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SYMPOSIUM

URGENT NOTICE

We regret to announce that the Third Annual HERL Risk Assessment Symposium on Susceptibility and Risk **MUST BE POSTPONED OR CANCELLED** due to severe budgetary constraints during this period. The conference was originally scheduled for November 6 through 9, 1995 in Raleigh, North Carolina. We are investigating the availability of dates in the spring of 1996. The new date will be broadcast widely through mailings and advertisements. We apologize for the inconvenience this may cause, and hope to reschedule for a time that is convenient for speakers and attendees alike.

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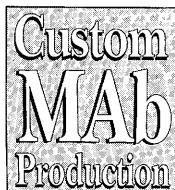
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