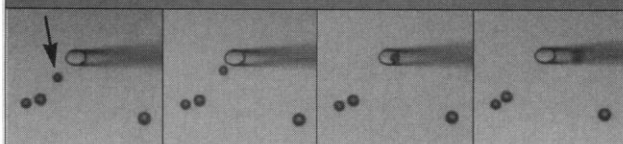
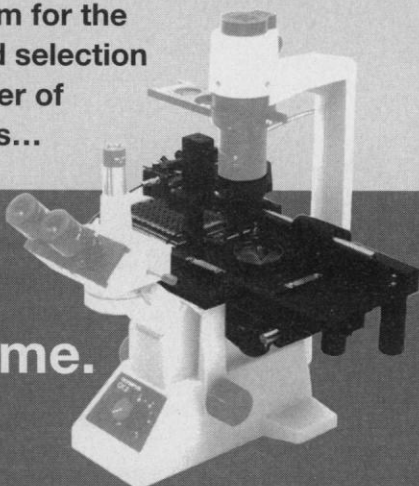


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P 16

MAKING THINGS WORK

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CALL FOR PROPOSALS

FELIX

CLIO

DEADLINE: 1 December 1996

by two Infrared Free Electron Laser facilities supported jointly under the TMR Programme for Access to Large-scale Facilities. Beam time at the two facilities is allocated on the basis of a review of research proposals by Programme Advisory Committees with EU membership. Access is free of charge for all non-proprietary research. Limited funding from TMR is available for travel by researchers from EU countries.

FELIX at FOM Institute for Plasma Physics, Nieuwegein, The Netherlands

The FELIX facility provides continuously tunable infrared radiation in the range of 5-110 μm , at peak powers up to 100 MW in sub-ps pulses. The present call concerns the period March - August 1997.

Information about FELIX and ancillary equipment, including guidelines for submitting a proposal, is available from Mrs Laura M.P. van Veenendaal, Secretary of Laser Physics Department, FOM Institute for Plasma Physics 'Rijnhuizen', Nieuwegein, The Netherlands. Fax: +31-30-60 31 204; e-mail: lauravv@rijnh.nl. More information is available on: <http://www.rijnh.nl>.

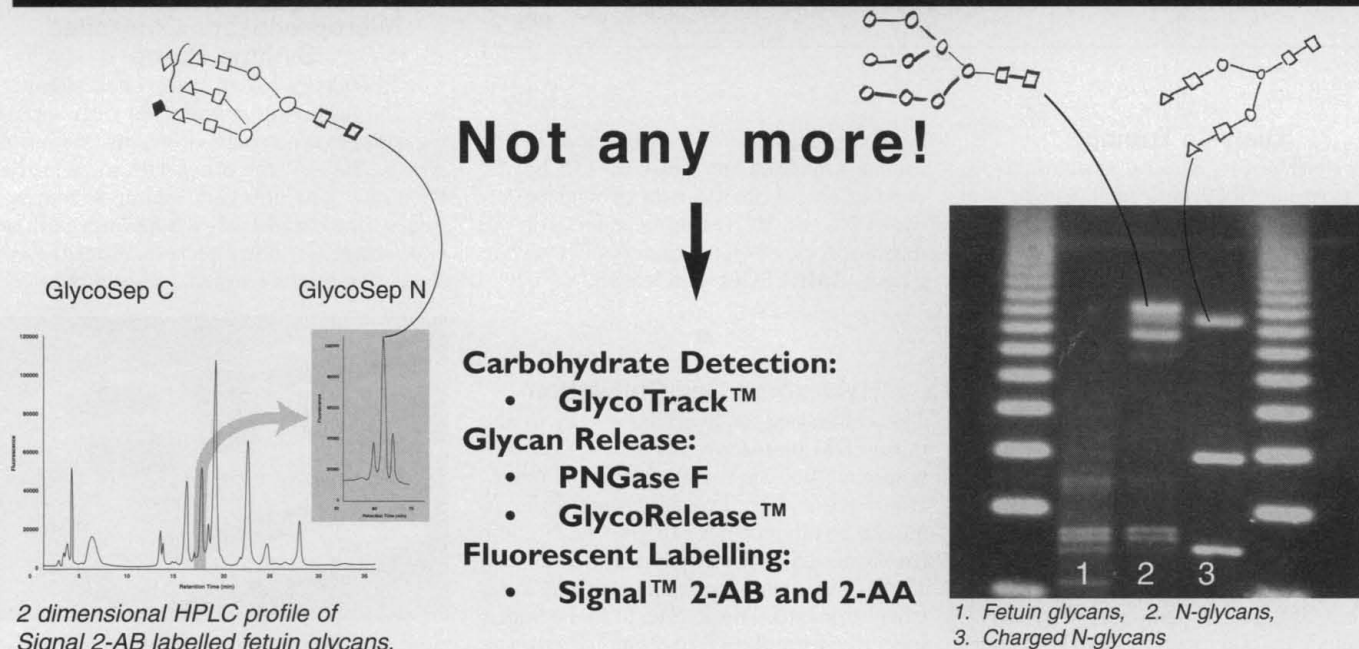
CLIO at LURE, Orsay, France

The CLIO laser user facility provides beam in the spectral range: 3 to 53 μm (continuously tunable) with peak power: 10 to 100 MW (in 0.5 to 6 ps pulses, minimum linewidth $\approx 0.3\%$), repetition rate of 32 to 4 ns (during 10 μs macropulses 1-50 Hz) and average power up to 2 W. Ancillary equipment (in particular OPOs between 2 to 6 μm) is available.

Those interested in the use of CLIO in 1997 are invited to submit a research proposal on requests forms, which are available from Mrs M. Le Monze, LURE, Bat. 209 D, Université Paris-Sud, 91405 - Orsay, France. Fax: +33-1-6446-4148, Tel.: -8014, e-mail: lemonze@lure.u-psud.fr. More information is available on: <http://www.lure.u-psud.fr/www/lure/clio.html>.

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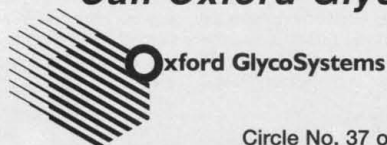
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Agarose Comparable to Acrylamide

Agarose SFR (super fine resolution) rivals acrylamide in its ability to resolve DNA fragments less than 1000 bp, without the hazards. DNA bands differing in size by only 2% can be resolved in the range of 1000 to 200

bp. For example, a DNA fragment of 242 bp can be separated from one of 238 bp. By varying the concentration of agarose between 2% and 5%, the user can focus on the separation of DNA fragments of a certain length. **AMRESCO. Circle 138.**

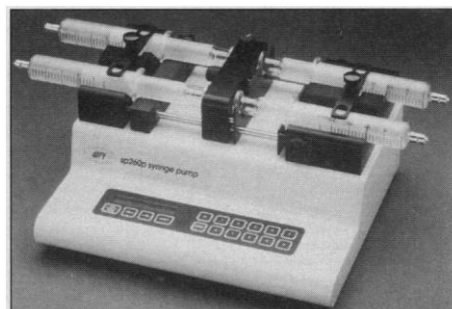
Hybridoma Cell Cultivation

The cultivation of hybridoma cells in the miniPERM bioreactor is a simple and economic method for the production of monoclonal antibodies. Typically, more than 70 mg can be produced in 1 to 4 weeks. Because the expressed antibody is contained in only 35 ml of medium, downstream processing is straightforward. The proSYSTEM medium is specially formulated to complement the bioreactor process. According to the manufacturer, it not only outperforms serum-supplemented medium in terms of antibody

production, it requires less than 2% of the serum needed when using standard medium. **Heraeus Instruments. Circle 139.**

Microprocessor-Controlled Syringe Pump

The SP260p Push-Pull Pump offers simultaneous infusion and withdrawal with opposing syringes on a single drive. As one set of syringes infuses, the other withdraws at the same rate. The unit can hold up to four syringes, 10 μ l to 140 ml each for push-pull, or two syringes for one direction. After the syringe diameter is entered, either directly or

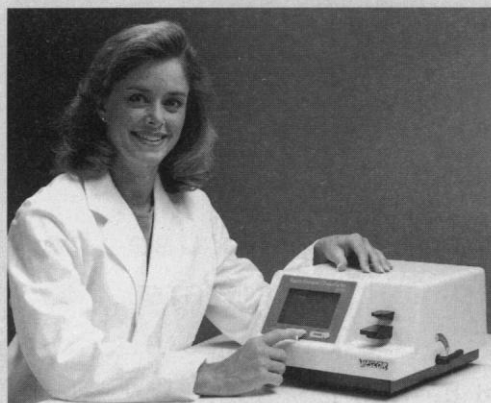


from a table in memory, the pumps' microprocessor automatically performs calibration and control functions. A built-in interface for computer linking or "daisy chaining" allows operation of up to 100 pumps at one time. An optical encoder stall detector prevents pump damage. **World Precision Instruments. Circle 140.**

Antibodies

A line of mouse monoclonal antibodies is available paired for immunoassay or enzyme-linked immunosorbent assay (ELISA) development. One antibody is supplied unconjugated, and the other is biotin-labeled for use as detection reagent. The following matched pairs are available: human VCAM (CD106), serum amyloid P, serum amyloid A, P-selectin (CD62P), ICAM (CD54), β_2 -microglobulin, interleukin (IL)-8, IL-1 β , MCP-1, MCP-3, and epidermal growth factor (EGF). **Antigenix America. Circle 141.**

A range of matched antibody pairs is available for use in developing ELISAs for cytokine quantification. The capture anti-



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body is a monoclonal and is used to coat microtiterplates. The detection antibody is a polyclonal that is affinity-purified and conjugated to biotin. This allows the flexibility to use any enzymatic, chemiluminescent, or fluorescent detection system for which avidin conjugates are available. Pairs are available for IL-1 β , IL-2, IL-4, IL-6, IL-8, IL-10, IL-11, IL-12, IL-13, IL-15, MIF, MIP-1 α , MIP-1 β , RANTES, tumor necrosis factor- α , and transforming growth factor- β 1. **R&D Systems Europe. Circle 142.**

A goat polyclonal antibody to vesicular acetylcholine transporter has been used for immunohistochemistry on rat and mouse tissue. The antibody labels cholinergic cell bodies in the septum and nucleus basalis as well as cholinergic fibers in the brainstem and spinal cord. Applications include Alzheimer's, neuromuscular, and autonomic nervous system research. **Chemicon International. Circle 143.**

Rat EIA Kits

Enzyme immunoassay kits directed against rat antigens are simple to use, specific, and accurate. They offer nanogram and milliliter detection ranges. Kits are available directed against rat interleukin-8, transferrin, ferritin, prolactin, hemoglobin, albumin, α -1-AG and β_2 -microglobulin. **Wako BioProducts. Circle 144.**

Hybridoma Genotyping Primer set

The Hybridoma Genotyping (H-G) Primer set is a set of oligonucleotide primers for characterizing the genotype of mouse hybridomas. Using the H-G Primer set, the immunoglobulin gene sequence encoding the variable region of the mouse immunoglobulin (Ig) G1, 2a, 2b, 3, and IgM can be amplified by reverse transcriptase polymerase chain reaction and fingerprinted by restriction fragment length polymorphism (RFLP). The IgG RFLP fingerprint is an unequivocal method for identifying hybridoma clones. **LabLogix. Circle 145.**

Dual Pure Water System

The Water Prodigy II is a compact system for low-volume applications such as atomic absorption, ion chromatography, fluorescence analysis, and microbiological techniques. It makes use of carbon adsorption, reverse osmosis, deionization, and microfiltration to produce pure water. The unit provides both reverse osmosis-grade Type III and reagent-grade Type I water. As inlet tap water passes

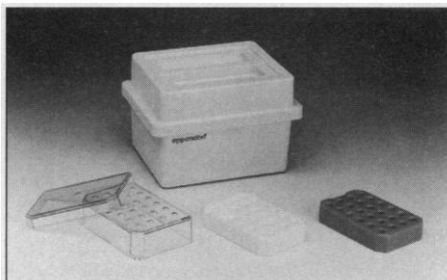
through the reverse osmosis membrane, it is stored in a 1.4 liter reservoir. The reverse osmosis-purified water is dispensed from the reservoir through a valve at a rate of 1300 ml/min and the Type I water is dispensed through a gun at a rate of 1100 ml/min. Once the reservoir is depleted, the dispensing rate is 200 ml/min for either. **Labconco. Circle 146.**

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tory bench without ice. The complete modular system consists of a 24-place transfer/storage rack with matching cold pack, and an insulated storage box with lid. The IsoRack transfer/storage rack is stackable and floats for thawing or incubating of samples. **Brinkmann Instruments. Circle 148.**

Literature

CD-CHROM is a comprehensive chromatography database in CD-ROM format. Researchers can access 106,000 chromatography abstracts using DOS, Macintosh, or Windows. **Preston Publications. Circle 149.**

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¹Nishi, T., et al, "High Efficiency *In Vivo* Gene Transfer Using Intraarterial Plasmid DNA Injection Following *In Vivo* Electroporation", **CANCER RESEARCH**, 56, 1050-55 (1996)

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The Department of Psychology at Wayne State University has a **TENURE-TRACK** position open in Biopsychology, effective fall 1997. While intended to be at the rank of Assistant Professor, more senior applications with excellent records will also be considered. The new appointee is expected to establish a nationally recognized, externally funded research program and teach two undergraduate/graduate courses per semester. Expertise in any domain of biopsychology will be considered, but those whose work employs modern neuroscience and/or molecular biology techniques are particularly desired. Experience teaching a graduate-level learning course is desirable.

Applicants should send a cover letter describing their teaching and research interests, an up-to-date curriculum vitae, and copies of recent publications, and should arrange for three letters of reference to be forwarded to:

**Chair, Biopsychology Search
Department of Psychology
Wayne State University
71 West Warren Avenue
Detroit, MI 48202**

Applications will be accepted until December 1, 1996 or until the position is filled. Interested applicants are encouraged to apply immediately.

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The Neuroscience Research Institute (NRI) and the University of Ottawa seek applications from basic neuroscience researchers for **TENURE-TRACK-EQUIVALENT** appointments. The successful applicants will possess a strong background in molecular neurosciences. They will have demonstrated an independent research program applied to clinically relevant research areas broadly relating to stroke, neurodegenerative diseases, or mental illnesses. Areas of particular research interest would include: neurotrophins and neuronal survival, receptor-mediated signal transduction mechanisms, regulation of apoptosis/proliferation and cell migration/differentiation in brain, transgenic approaches to understanding brain function, and regulation of gene transcription in the brain.

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Please send curriculum vitae and a description of current and future research plans to:

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According to Canadian Immigration requirements, this ad is primarily addressed to Canadian citizens and landed residents of Canada.

Applications will be received until December 31, 1996.

As part of a major commitment to the development of structural biology at the University of Pennsylvania, the Department of Biochemistry and Biophysics invites applications for full-time **TENURE-TRACK FACULTY** positions in NMR. Applicants should have demonstrated expertise and accomplishments in modern multidimensional NMR with a strong background in protein and/or nucleic acid structure, dynamics, and addressing major biological research questions. Candidates should forward their curriculum vitae and a summary of research interests and plans, and should arrange to have three letters of recommendation sent to: **Ms. Ruth Keris, NMR Search Committee, Department of Biochemistry and Biophysics, University of Pennsylvania School of Medicine, Philadelphia, PA 19104-6059.** The University of Pennsylvania is an Affirmative Action/Equal Opportunity Employer and encourages applications from women and minorities.

Enter a world of scientific discovery at Canji, Inc. a division of the Schering-Plough Research Institute. Using innovative gene therapies based on tumor suppressor genes and other cell-cycle regulators, our pioneering scientific team has developed therapeutic applications for the human tumor suppressor genes p53 and RB. Today, we're continuing the tradition in the development of new potent weapons in the war against cancer. As we continue to make important breakthroughs in hyperproliferative research, we need more dedicated scientists to help us lead the way into the 21st century. Currently, we have the following exceptional career opportunities available at our Torrey Pines Science Park setting in San Diego, CA.

EXCITING

New Opportunities in Gene Therapy

Senior Scientist, Immunology

Develop cytokine gene therapy through the establishment of a strong immunology function. Responsibilities include characterizing the immune response to recombinant adenoviral vectors and evaluating methods to minimize the immune response

for gene delivery strategies. To qualify, you must be an experienced scientist with a PhD in

Immunology or a related discipline and at least 3 years of relevant experience,

including a background evaluating the immune response to viral antigens with *in vivo* and *in vitro* techniques. Solid understanding of cytokine biology and an interest in the application

of cytokine gene therapy for the treatment of human diseases are essential.



Senior Scientist, Biochemistry

Conduct biochemical studies to help overcome obstacles to product candidate research. Studies will include delineating specific structure and biological protein function, and examining the mechanism of tumor suppression. To qualify, you must have a PhD in Biochemistry or a related discipline and 3-5 years' experience, including lab supervision and hands-on experience in protein chemistry, enzyme kinetics and molecular biology methods related to protein function. Knowledge of biological and biochemical assay development, and phage systems desired.

Senior Scientist, Gene Delivery

Design and execute studies to evaluate *in vivo* gene transfer, expression and efficacy. Experiments will range from those focusing on developing methods optimizing gene transfer and expression to injured vessels in models of restenosis, to those characterizing systemic non-viral gene delivery and expression. To qualify, you must have a PhD in Pharmacology or a related discipline and 3-5 years of relevant experience. Strong research interests in gene delivery issues that limit *in vivo* gene therapy, experience with the design and execution of *in vivo* studies, and research interests in angiogenesis and vascular biology are required. Knowledge of methods to quantitate gene delivery and expression *in vivo* is desirable.

Postdoctoral Scientist, Cell Biology

Characterize gene transfer and expression on a cellular and molecular level. Responsibilities include describing the internalization, intracellular transport and nuclear translocation of gene delivery systems; characterizing the cellular response to expression of genes critical in cell cycle regulation; and conducting experiments to evaluate and optimize alternative gene delivery strategies. To qualify, you must have a PhD in Cell Biology, Molecular Biology, Biochemistry or a related discipline and an interest in gene therapy. Strong research interest in tumor suppressor genes and other regulators of the cell cycle is required. Experience with cell biology techniques is also essential. A background with fluorescence microscopy techniques is desirable.

Associate Scientist, Pharmacology

Execute *in vivo* experiments and analyze tissue samples to evaluate the effects of gene therapy.

Responsibilities include refining procedures for tissue harvest and subsequent processing, and assisting in the design and execution of *in vivo* experiments to evaluate the therapeutic effects of tumor suppressor genes and other hyperproliferative diseases. To qualify, you must have a BS or MS in

Pharmacology, Toxicology or a related discipline and 3-5 years of experience in biotechnology, including conducting analysis of tissue samples, histology, histochemistry and immunohistochemistry. An interest in image analysis and familiarity with computer-based quantitative analysis are highly desirable.



Assistant Scientist, Molecular Biology

As a molecular biologist for our non-viral gene delivery program, you will develop and test novel gene therapy vectors to treat cancer and other diseases. To qualify, you must have a BS or MS in Biochemistry or a related discipline and at least 3 years' experience in molecular and cell biology. A strong background in molecular techniques (i.e., vector construction, cloning, PCR), mammalian expression systems, and analysis of recombinant proteins, cell biology and tissue culture is required. Gene therapy research experience in an industry setting is preferred.

In return for your expertise, we offer a highly competitive compensation package, excellent benefits, and a progressive environment that is conducive to professional advancement. For immediate consideration, mail/fax your resume indicating position of interest and salary requirements, to: Human Resources, Canji, Inc., 3030 Science Park Road, San Diego, CA 92121. Fax: (619) 597-0237. We are an equal opportunity employer.



OPENING THE DOORS TO MEDICAL KNOWLEDGE

**That's been ICN Pharmaceuticals' mission
for over three decades.**

As a healthcare pioneer and leader, ICN has been committed to improving the quality of life for people around the globe.

That's why ICN created the International Virology Prize, awarding more than \$300,000 over seven years to recognize top medical researchers for advancing the understanding, prevention or treatment of viral diseases.

This year, we're proud to honor Dr. Stanley Prusiner of the University of California San Francisco.

Dr. Prusiner's discoveries revolutionized our understanding of the infectious agents behind degenerative diseases of the central nervous system and took us several giant steps closer to treating them effectively.

Thanks to professionals like Dr. Prusiner, ICN and others are able to make advances in medical treatment that enhance the lives of people around the world.



ICN Pharmaceuticals, Inc.
© He who has health has hope. And he who has hope has everything.

TARGETED GENETICS CORPORATION

Cell Culture Staff Scientist

Targeted Genetics Corporation is a biotechnology company developing integrated gene and cell therapies for the treatment of acquired and inherited diseases. Continued growth has created a new opportunity for a Staff Scientist in the Process Development group. The successful candidate will join a highly interactive group dedicated to the aggressive pursuit of research programs leading to therapeutic products.

We are looking for a cell culture scientist/engineer to develop production methods for gene therapy vectors. This position will effectively integrate cell culture and virology background with engineering and bioreactor experience to design scalable cGMP manufacturing processes. Applicants must have proven experience in the development and scale-up of processes for gene therapy vectors, recombinant therapeutics or vaccines in mammalian or insect cells.

Individual must be familiar with standard virological, molecular and biochemical techniques that are used for process development and validation. Knowledge of quality control, cGMP and regulatory issues is required. Applicants need strong communication skills and the ability to work as a member of a creative team. Supervisory experience is a plus.

To qualify candidates must have a Ph.D. in cell biology, virology, biochemistry or biochemical engineering and 3-5 years of relevant experience in an industrial setting. For consideration, please submit your C.V. and resume to:

Targeted Genetics Corporation

REF: CC1096

1100 Olive Way, Suite 100

Seattle, WA 98101

FAX (206)521-7872

email: Sackettp@targetn.com

TGC is an equal opportunity employer

VICE PROVOST FOR RESEARCH OREGON STATE UNIVERSITY

Oregon State University invites applications and nominations for the position of Vice Provost for Research. This is a 12-month, 1.0 FTE appointment, with a collateral appointment at the rank of Professor in a department appropriate to the individual's background. Salary will be commensurate with experience and qualifications. The Vice Provost for Research is responsible for the oversight, coordination, and facilitation of all research activities at OSU, including sponsored research, various research centers and institutes, interdisciplinary research programs, and research of the Forest Research Laboratory, the Oregon Agricultural Experiment Station, the Sea Grant and Space Grant programs, and the Research Office. In addition, the Vice Provost for Research represents OSU to funding agencies and foundations, to regional and national research consortia, and to Federal and State legislators. The Vice Provost has administrative responsibility for the Research Office, institutional research funds, research centers and institutes, and the Technology Transfer and Trademark programs for OSU.

Oregon State University is a Land Grant, Sea Grant, and Space Grant university, and a Carnegie Class I Research University that receives approximately \$135 million annually for sponsored research.

We are seeking an individual who has a record of significant accomplishment in research, substantial experience in the administration of research programs, experience in dealing with funding agencies, and strong interpersonal skills. The individual must hold an earned doctorate and be tenurable within an academic unit of OSU. Experience dealing with Congress, familiarity with research compliance and intellectual property issues, a record of innovation and promotion of research programs, and a positive record in Affirmative Action are highly desirable. The full position description is available upon request.

Nominations should include name and address of the nominee and a letter addressing the qualifications of the nominee for this position. Applicants should submit a letter of interest and a resume along with names, addresses, phone numbers, and e-mail addresses of five references to:

G. Brent Dalrymple, Chair, Search Committee; Oregon State University; 104 Ocean Admin. Bldg.; Corvallis, OR 97331-5503; phone: (541) 737-3504; fax (541) 737-2064; email: kyates@oce.orst.edu

References will not be contacted without prior approval of the applicant. Nominations are due October 18, 1996. Applications are due November 8, 1996. This position is available January 1, 1997, but will remain open until filled. OSU is an AA/EEO employer and has a policy of being responsive to dual-career needs.

Faculty Positions in Developmental Biology Harvard Medical School Beth Israel Hospital

The Molecular Medicine Unit of Beth Israel Hospital is seeking applications for tenure track positions at the Assistant Professor level. The successful candidate will hold the Ph.D. and/or M.D. degrees and will have completed a minimum of two years of postdoctoral training in molecular cell biology, physiology, or genetics. Applicants will be expected to establish a funded independent research program in the broad area of developmental biology. Generous start-up funds and some ongoing support will be provided. The Molecular Medicine Unit faculty currently investigate inductive signaling in early vertebrate development, protein translocation and targeting, signal transduction, and ion homeostasis. Candidates should send CVs and names of three references to:

Robert D. Rosenberg, M.D., Ph.D.

Faculty Search Committee

Molecular Medicine Unit

Beth Israel Hospital, RW663

330 Brookline Avenue

Boston, MA 02215

The Beth Israel Hospital is an Equal Opportunity employer.

Howard Hughes Medical Institute

Predoctoral Fellowships in Biological Sciences

1997 Competition

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

Fellowship Terms

- Full-time study toward the Ph.D. or Sc.D.
- Up to five years of support possible
- \$15,000 annual stipend, effective June 1997
- \$15,000 annual cost-of-education allowance, effective June 1997

Eligible Fields of Study

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

Eligibility

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

Schedule

Application deadline: November 15, 1996

Awards announced: early April 1997

Fellowships start: June 1997–January 1998

1997 Program Announcements, Eligibility Guidelines, and Applications

Hughes Fellowship Program
The Fellowship Office
National Research Council
2101 Constitution Avenue
Washington, DC 20418, United States of America
Telephone (202) 334-2872
Fax (202) 334-3419
E-mail <infofell@nas.edu>
<http://www.nas.edu/fo/index.html>

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

Much of the success of Bayer Corporation, Pharmaceutical Division, is based on innovation and research. At the same time, all of our success is based on the talent and drive of our people. As an integral part of Bayer, a \$26.8 billion global leader, we have the resources to provide our employees with a supportive, state-of-the-art, multidisciplinary environment that encourages their professional growth and makes our success possible. Join our dedicated team of professionals in the following positions:

Postdoctoral Fellow Physiologist/Gene Targeting

The pharmaceutical division of Bayer Corp. is seeking a postdoctoral fellow with experience in rodent physiology to investigate the mechanisms of insulin stimulation of glucose transport in muscle and fat. The candidate must have previous experience in techniques related to glucose metabolism in rodent models of diabetes and an interest in learning cell and molecular techniques related to the sorting of GLUT4 and insulin signaling. The successful candidate will be involved in determining the role of the glucose transporter vesicle anionopeptidase. The function of this molecule in sorting and signaling will be investigated in cellular models and in knock-out animals. Several other knock-out animals are also currently available for study within the Institute for Metabolic Disorders. We are looking for someone who is self motivated and aggressive in applying new technologies to biological problems. **Dept. ELAD**

Postdoctoral Fellow Molecular Neurobiologist

In this position, you will study the function of a G-protein coupled neuropeptide Y receptor in the hypothalamus. Research will involve the functional studies of the receptor on the feeding behavior and obesity. Research background in molecular neurobiology is required; some experience with in situ hybridization and immunohistochemistry is desirable. **Dept. ELYH**

We offer attractive compensation and generous benefits. For immediate consideration, please forward a resume, including salary history, indicating Dept. Code to: **Bayer Corp., Pharmaceutical Division, 400 Morgan Lane, B25, West Haven, CT 06516. No phone calls please.** An Equal Opportunity Employer M/F/D/V. Bayer Corp. is committed to creating and maintaining cultural diversity within our work environment.



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OFFICE OF HEALTH AND ENVIRONMENTAL RESEARCH



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Information and applications:

Hollaender Postdoctoral Fellowships

Education and Training Division
Oak Ridge Institute for
Science and Education
P.O. Box 117
Oak Ridge, TN 37831-0117
(423) 576-9975

Deadline January 15, 1997



**Our agricultural products are redefining
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We're Ceregen.

As a subsidiary of the Fortune 100 Monsanto Corporation, Ceregen is a world leader in the discovery and development of agricultural products based on advanced chemistry and biotechnology. Our new strains of cotton, corn and soybeans are insect-proof, so they don't need harmful pesticides. And our professionals are playing a key role in their on-going product development and support, and in our future.

Biochemist/Enzymologist

In this post-doctoral position, you will put your interest in plant biotechnology to use as you solve challenging technical problems for a company noted for world-class biotechnology research programs.

We seek an independent, highly-motivated individual with a Ph. D. in Biochemistry and a proven track-record in enzymology, protein purification and assay development. You'll also need hands-on experience with various biochemical analyses, relevant techniques and bacterial expression systems. A knowledge of flavo-proteins and plant biochemistry is a plus.

There's only one thing more diverse than Monsanto's global business units—our talented group of professionals. To join them in a unique environment that's specifically designed for communication and innovation, send your resume to: **Monsanto Company, 700 Chesterfield Parkway North, Mail Zone GG4J, St. Louis, MO 63198; Fax: 314-537-6567; E-mail: mmead@ccmail.monsanto.com.** EEO/AA Employer M/F/D/V.



inflazyme



Inflazyme is a dynamic young biopharmaceutical company principally focused in the design and discovery of novel therapeutics for inflammatory diseases.

Regulatory Project Manager— Preclinical

We are currently seeking a proven leader with strong managerial and motivational skills to assume overall responsibility for new product development, review GLP preclinical studies to prepare summary documents in support of preclinical IND and NDA submission to the FDA, assist the laboratory staff to maintain QC, and respond to FDA requests concerning preclinical data.

Qualifications include a Ph.D. or similar degree in toxicology, pharmacology, or a related discipline, and at least 5 years of previous experience in the field.

We offer a highly competitive compensation and benefits package. Interested candidates should forward a resume with salary expectations to: **Inflazyme Pharmaceuticals Ltd., Suite 460-999 West Broadway, Vancouver, BC, V5Z 1K5. Fax # (604) 733-5281.**

The Science of Agricultural Genetics

Genome Research Opportunities

The Genome Research Group at Pioneer Hi-Bred International is assembling a database of corn ESTs that already contains more sequences than are available for other plants such as Arabidopsis or rice. With our Trait Utilization System, we have the ability to assess the function of any corn gene by rapidly identifying transposon insertion mutations. The intention is to expand on and utilize these resources to identify candidate genes for agronomically important quantitative traits that can be further manipulated in our germplasm collection. Several positions are open in this rapidly expanding group:

RESEARCH MANAGER

Array Technology (Job #GP-701)

This person will manage and develop applications for gene discovery and mutation screening in corn involving high-density arrays of bacterial colonies or DNA probes derived from a corn EST database. Extensive interaction with existing projects within Genome Research, other projects within Trait and Technology Development, and a Lab Automation group is envisaged. Responsibilities will also involve management and evaluation of collaborations with other companies. Strong interpersonal skills, enthusiasm and drive will be essential, as well as a solid background in molecular biology techniques and a demonstrated ability to implement and manage multiple projects involving large numbers of samples and interaction with collaborators. Other requirements include: experience with supervising research staff, setting research goals/timelines, managing budgets, and making purchase decisions on high-cost equipment; familiarity with molecular biology data-bases and software; and an ability to communicate not only with molecular biologists, but also lab automation personnel and external collaborators in other disciplines. Familiarity with maize genetics and/or direct experience with array technologies or high-throughput liquid-handling methods would be highly desirable. Candidates should have a Ph.D. in Biological Sciences with 7+ years of laboratory experience in molecular biology, and at least 3 years experience managing a research group, preferably in an industrial setting.

POST-DOCTORAL RESEARCH ASSOCIATE

Gene Inactivation (Job # GP-702)

This person will adapt a novel gene targeting technology for site-specific alteration of genes in plant cells, the goal being to develop an alternative method for assessing gene function through gene inactivation. Demonstrated ability to solve problems and develop innovative procedures is required. Experience with microprojectile bombardment and selection/identification of transformed monocot cells in tissue culture would be particularly useful. Background knowledge of organic chemistry, cell biology, or DNA repair would also be desirable. Strong interpersonal skills, enthusiasm and drive will be essential. Good verbal and written communication skills, as well as the motivation to write up results for presentation and publication in a timely manner will also be important. Candidates should have a Ph.D. in Biological Sciences with experience in molecular biology and plant transformation techniques. The appointment will be for two years with the option for a third year extension subject to review. Extensive interaction with another post-doc developing methods for site-specific integration of transgenes via a related approach is envisaged.

SENIOR RESEARCH ASSOCIATE

Heterosis Research (Job #GP-703)

The role of this position is to employ and develop methods for identifying candidate genes associated with heterosis in corn based on their pattern of gene expression. This position will involve extensive interaction with other members of the Genome Research group and key individuals involved in Corn Breeding Research, Lab Automation and Information Management. Requirements include experience with mRNA isolation from plants, cDNA synthesis, PCR amplification, nucleic acid hybridization principles and quantitative mRNA analysis; familiarity with molecular biology databases and software; demonstrated ability to design and manage large-scale, high-throughput experiments with application of appropriate statistical procedures; ability and motivation to develop or apply new methods, solve problems and keep current on state-of-the-art technology; strong interpersonal skills, and the ability to work both independently and as part of a team. Experience with field genetics or QTL mapping in plants would also be desirable. Candidates should have a B.S. or M.S. in Biological Sciences with 5+ years of laboratory experience in molecular biology. Courses in molecular biology, biochemistry and plant physiology are essential, and some background knowledge of plant breeding or quantitative genetics is preferred.

RESEARCH ASSOCIATE

cDNA Library Construction (Job #GP-704)

This person will join an existing team involved in constructing and evaluating cDNA libraries for the corn genome project, and will help develop normalized cDNA libraries and gene-enriched genomic libraries. Required skills include RNA/DNA isolation, cDNA synthesis, PCR amplification, Northern/Southern hybridization and cDNA/genomic library screening. Experience in quantitative mRNA analysis, subtractive cloning methods or differential display is preferred. Candidates should have a B.S. or M.S. with coursework in molecular biology and biochemistry and 3+ years of laboratory experience in molecular biology.

We offer competitive salaries and excellent, comprehensive benefits such as 401(k), tuition and relocation reimbursement. Des Moines is a prospering heartland city that ranks well above the national averages in affordability and education. Our location provides a mix of beautiful open spaces and city life advantages. For confidential consideration send 3 copies of your resume and cover letter indicating job number by October 7, 1996 to: Pioneer Hi-Bred International, Inc., Attn: PERSONNEL (Job #GP _____), P.O. Box 1004, Johnston, IA 50131-1004.

Pioneer Hi-Bred
International, Inc.,
is the world leader in
agricultural genetics.
Founded in 1926,
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invests more than
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uct development.
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products are grown
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crop-producing
continent in the
world. At our
headquarters in
Des Moines, Iowa,
we're adding to our
Research team.



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INTERNATIONAL, INC.**
*An Equal Opportunity
Employer*

STUDY DIRECTOR RADIATION HEALTH EFFECTS

The Commission on Life Sciences of the National Research Council's Board on Radiation Effects Research seeks a study director to plan and execute studies of the somatic and genetic effects induced in humans exposed to ionizing radiation. Will serve as the primary staff officer for one or more committees of 10 to 15 expert volunteers. Applicant should have a Ph.D. or M.D. degree, or equivalent in a field related to radiation biology. At least 5-10 years experience in conducting and managing sponsored research programs is required. Applicants should be able to demonstrate an ability to plan, organize, and conduct a complex research program involving multi-disciplinary and controversial issues closely linked to difficult risk-management decisions. Specific experience in radiation biology or radiation physics and record of scholarly achievement in field of experience desired. Ability to direct and motivate work by both volunteer committee members and support staff is essential. Applicant should also be skilled in communicating with sponsors and the general public in both written and oral presentations. Send curriculum vitae or professional biography and letter of interest in confidence to: **National Research Council, Board on Radiation Effects Research - JZ, 2101 Constitution Avenue, NW, Washington, D.C. 20418.** An Equal Opportunity Employer.



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SCIENCE



GEORGETOWN UNIVERSITY Tenure-Track Faculty Position Department of Biology Georgetown University In the Field of Molecular Biology

Applications are invited for a tenure-track position at the level of assistant professor to commence August 1997. The successful applicant is expected to establish a grant-supported research program while contributing significantly to undergraduate and graduate education. Faculty in and enthusiasm for instruction of undergraduate students are essential. She/he will teach each year a one-semester course in Biological Chemistry for undergraduate science majors in the fall semester and an advanced course in the spring semester.

We seek an energetic investigator, well trained in molecular biology, who pursues important biological problems. Excellent opportunities exist for collaborations with ongoing research programs on the Georgetown campus in cell biology, developmental biology, genetics, immunology, neurobiology, and tumor biology.

Applications should include: (1) a CV, (2) the names of three individuals who are familiar with the applicant's potential as a teacher and independent research scientist, (3) a statement describing current and projected research, and (4) a statement describing an advanced course the applicant desires to teach. Please send applications by December 1, 1996 to **The Molecular Biology Search Committee, Department of Biology, Georgetown University, Washington, DC 20057.**

Georgetown University is an Equal Opportunity/Affirmative Action Employer.

BERRY COLLEGE

Dean, School of Mathematical and Natural Sciences

Berry College invites applications and nominations for the position of Dean of the School of Mathematical and Natural Sciences. Located in the northwest Georgia mountains next to Rome, GA, Berry College is an independent, coeducational college with 2,000 undergraduate and graduate students and a comprehensive curriculum that stresses academic excellence, practical work experience, and an interdenominational religion-in-life program.

The Dean serves as one of five academic leaders reporting to the Vice President for Academic Affairs. The School of Mathematics and Natural Sciences offers undergraduate majors in animal science, biochemistry, biology, chemistry, computer science, decision science, horticulture, mathematics, and physics. There are 500 students seeking majors in the School. A new science facility is being planned.

Candidates must have an earned doctorate in one of the fields included in the School; a record of teaching, research, and service that qualifies for the rank of full professor; strong administrative, organizational, planning, and communication skills; and the experience and skills needed to represent the School within the College and to external constituencies.

Applications and nominations should be sent to **Dr. Doyle Mathis, Vice President for Academic Affairs, Berry College, P.O. Box 490640, Mount Berry, Georgia 30149-0640.** *Berry College is an Equal Opportunity Employer.*



FACULTY POSITIONS Central Institute for the Deaf Sensory Neuroscience

The Research Department at the Central Institute for the Deaf is seeking three new faculty members with a record of excellence in research emphasizing molecular and cellular approaches to degeneration, rescue, and repair, with a focus on the auditory system preferred. Candidates are invited to apply for positions at all levels: **Assistant, Associate, and/or Full Research Scientists.** CID is a major research and education center founded in 1914 to address the needs of the hearing impaired. We are an affiliate of Washington University Medical Center; joint appointments are encouraged. Required qualifications: earned doctorate (Ph.D. or equivalent degree); minimum of three years of postdoctoral training; publication record in peer-reviewed journals; and evidence of scholarly activity at level of proposed rank. Multidisciplinary research a plus. The successful candidate will be expected to develop a program of externally funded research. Opportunities are available for teaching and/or clinical responsibilities depending on personal interests and training. Salary and rank will be commensurate with qualifications and experience. For fullest consideration, applications should be received by Dec. 20, 1996. Submit statement of research interests, curriculum vitae, and names and addresses of three references to:

Judith Mosinger Ogilvie, Ph.D.
Neuroscience Search Committee
Central Institute for the Deaf
818 South Euclid Avenue
St. Louis, MO 63110
FAX: 314-977-0030
EOE/M/FH/V.

BIOINFORMATICS

at Schering-Plough



The Schering-Plough Research Institute is expanding its program in Bioinformatics - creating excellent opportunities

for scientists with experience in DNA/Protein sequence analysis, database searches and homology motif recognition to establish a new bioinformatics facility. This Bioinformatics Resource Center will collaborate closely with molecular biologists in the application of informatics tools to new and ongoing projects in drug discovery.

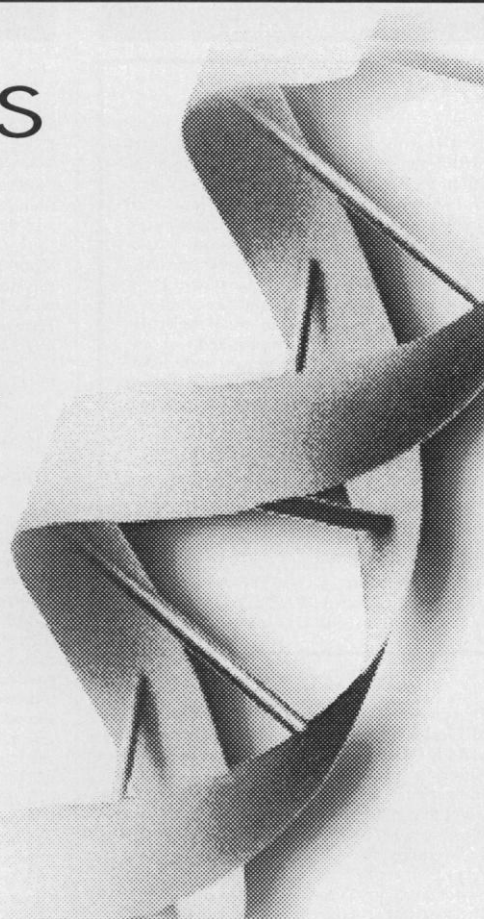
The successful candidates will have a PhD and 2 or more years of bioinformatics experience in a research setting along with strong interpersonal and communication skills. Exceptional individuals with an MS or MA degree are also encouraged to apply.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to forward a resume with salary requirements to: Human Resources-DMS/JG-BI, MS#1255, Schering-Plough Research Institute, 2015 Galloping Hill Road, Kenilworth, NJ 07033-0539. We are an equal opportunity employer. We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.



Schering-Plough
Research Institute

Using Science For Human Advantage



NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM

The Laboratory of Membrane Biochemistry and Biophysics, NIH, is seeking a biochemist/cell biologist to study lipid metabolism in the nervous system. The successful candidate will be appointed to a position within the Intramural Research Training Award (IRTA) program with a salary ranging from \$25,000 to \$42,000, depending upon years of experience. Candidates should have fewer than five years of relevant postdoctoral experience. Relevant experience in cell culture, biochemical assays, immunoblotting, chromatography, and sub-cellular fractionation is desirable. Candidates who wish to apply should send a C.V., bibliography, and three letters of recommendation to **Kathleen Hanratty, Personnel Office, Building 31, Room 1B58, 31 Center Drive MSC 2088, Bethesda, MD 20892-2088**. Applications must be postmarked by October 31, 1996.

BIOLOGY

Hillsdale College has the following two tenure track positions available in their Biology Department:

Developmental Biologist/Geneticist

Assistant Professor of Biology, tenure track position opens Spring 1997. Requires teaching Genetics and Developmental Biology and the maintenance of a mouse colony.

Human Gross Anatomist/Histologist

Assistant Professor of Biology, tenure track position opens Fall 1997. Requires teaching Human Gross Anatomy laboratories, two semesters of Human Anatomy and Physiology, and Histology.

Both positions require team participation in a freshman science course, occasional seminar leadership, directing research leading to senior theses, and advising students.

A Ph.D. is required as is a firm commitment to enthusiastic teaching at a small liberal arts college. Send letter of application, three letters of reference, curriculum vitae, and a list of references by November 1, 1996 to Dr. Donald Toczek, Director, Biology Department, Hillsdale College, Hillsdale, Michigan 49742. (Files completed prior to November 1 may receive early interviews.)

Hillsdale College is an independent, traditional college of liberal arts and especially committed to the preservation and transmission of modern man's intellectual and spiritual inheritance from the Judeo-Christian faith and Greco-Roman culture. EOE



HILLSDALE
COLLEGE

POSITIONS OPEN

FACULTY POSITIONS NEUROBIOLOGY

The Department of Neurobiology, University of Pittsburgh School of Medicine, is inviting applications for **TENURE-TRACK** positions at all ranks. Preference will be given to applicants with research programs investigating mechanisms of signal transduction in cell-cell interactions, particularly related to development, synaptic transmission, and plasticity in the nervous system. It is expected that the successful candidates conduct a competitive research program in which molecular and cellular approaches are emphasized to complement current department strengths in developmental and systems neurobiology. The positions require a Ph.D. and/or M.D. with at least two years of postdoctoral experience. Competitive salary support and start-up funds will be made available. Applicants should submit by December 31, 1996, a curriculum vitae, a detailed description of future research goals, representative recent publications, and names and addresses of three references to: **Dr. Pat Levitt, Chair, Department of Neurobiology, University of Pittsburgh School of Medicine, E1446 Biomedical Science Tower, Pittsburgh, PA 15261.** *The University of Pittsburgh is an Equal Opportunity Employer.*

CLINICAL CHEMIST

The Department of Pathology at Northwestern University Medical School has an immediate opening for an **ASSOCIATE DIRECTOR** of Clinical Chemistry. This is a full-time, continuing position; salary is negotiable based on experience. The Associate Director will assist the Director in the running of the clinical chemistry laboratory at Northwestern Memorial Hospital. The successful candidate is required to be an experienced M.D. or Ph.D. with a record of scholarly achievement, and a commitment to be actively involved in research. The individual selected will also be expected to participate in the teaching of residents and medical students. The selected candidate will be appointed at the rank of Assistant or Associate Professor (commensurate with credentials). Please send your curriculum vitae along with names and addresses of three references no later than October 31, 1996 to: **Jannard K. Reddy, M.D., Department of Pathology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611-3008.**

Northwestern University is an Equal Employment Opportunity/Affirmative Action Employer. Hiring is contingent upon eligibility to work in the United States. Members of minority groups are encouraged to apply.

CHAIR, BIOLOGICAL SCIENCES

TENURE-TRACK, 12-month position available June 18, 1997, at Emporia State University. The division offers Bachelor's and Master's degrees and has a long tradition of strong academic programs in organic and molecular-cellular biology and field- and laboratory-based areas. Ph.D. in a biological discipline with distinguished record of teaching and scholarship required, along with experience in and commitment to teaching, and collaborative decision-making. Must demonstrate scholarly and professional achievement, and interpersonal and leadership skills. Salary and rank negotiable; includes some teaching. Screening will begin October 10, 1996 and continue until position is filled. Send curriculum vitae; names, addresses (Email if available), and telephone numbers of four references; and letter addressing 1) teaching and research philosophies and 2) skills, visions, and experiences you would bring to this position to: **Dr. Dwight Moore, Search Committee Chair, Division of Biological Sciences, Campus Box 4050, Emporia State University, Emporia, KS 66801-5087. Telephone: 316-341-5311; http://www.emporia.edu/. Affirmative Action/Equal Opportunity Employer.**

THE UNIVERSITY OF ADELAIDE South Australia

Applications are invited for the position of **LECTURER** in Terrestrial Ecology, Department of Zoology. The position (Ref. 1798) is tenurable and available from 30 April 1997, with a salary of \$A43,042 to \$A51,113. Further information and the selection criteria may be obtained from: **Professor Russell Baudinette, Head of Department, Telephone: 61-8-8303-5597; FAX: 61-8-8303-4364; Email: head@zoology.adelaide.edu.au or at http://www.science.adelaide.edu.au/zoology/.** Closing date 11 October 1996.

POSITIONS OPEN

The Department of Biochemistry and Biophysics at the University of Pennsylvania invites applications from outstanding candidates for full-time **TENURE-TRACK FACULTY** appointments at all levels. The search will focus on biochemists with strong backgrounds in chemistry who are interested in major front-line molecular biological research. Candidates should forward their curriculum vitae and summary of research interests and plans, and should arrange to have three letters of recommendation sent to: **Ms. Ruth Keris, Biochemistry Search Committee, Department of Biochemistry and Biophysics, University of Pennsylvania School of Medicine, Philadelphia, PA 19104-6059.** *The University of Pennsylvania is an Affirmative Action/Equal Opportunity Employer and encourages applications from women and minorities.*

ASSISTANT/ASSOCIATE PROFESSOR OF NEUROPHYSIOLOGY University of Maryland School of Medicine Baltimore

TENURE-TRACK position available July 1997. The Department of Physiology at the University of Maryland School of Medicine is seeking an Assistant or Associate Professor with research interests in cell-to-cell communication in the vertebrate CNS. Individuals employing electrophysiological techniques in conjunction with other approaches are particularly encouraged to apply. Candidates must have a Ph.D. or M.D., at least two years of postdoctoral experience, and the ability to develop an independent research program. Applicants at the Associate level will have earned a substantial scientific reputation and secured independent funding. The Neurosciences group within the Department of Physiology is very active; descriptions of research carried out in the Department can be accessed via <http://physiomed.ab.umd.edu>. The individual chosen will join the campus-wide Neurosciences program and participate in teaching medical and graduate students. We offer competitive start-up funds, laboratory space, salary, and benefits. Please send a curriculum vitae, statement of research accomplishments and goals, and names of three references to: **B. E. Alger, Ph.D., Neurophysiology Search Committee, Department of Physiology, University of Maryland School of Medicine, 655 West Baltimore Street, Baltimore, MD 21201.** Screening of applications will begin October 15, 1996. Our campus is in Baltimore near the Inner Harbor, Convention Center, and the Orioles' baseball stadium. *University of Maryland at Baltimore is an Affirmative Action/Equal Opportunity/ADA Employer and has a strong institutional commitment to the principle of diversity in all areas.*

Cell Biologist. Furman University has a position for a tenure-track **ASSISTANT PROFESSOR** to teach a core course in cell biology and maintain a cell culture facility. Other teaching opportunities include introductory biology and upper-level undergraduate courses. Candidates must have the Ph.D. degree, a strong interest and ability in teaching, and a commitment to involving undergraduate students in an active research program. Furman is a selective liberal arts school of 2500 students with a vigorous program in the sciences. An inventory of facilities is available on the Web at <http://www.furman.edu/~snyder/equip.htm>. Submit curriculum vitae, copies of transcripts, a statement of teaching credentials and philosophy, a description of research interests, and three letters of recommendation to: **Dr. John Snyder, Department of Biology, Furman University, Greenville, SC 29613.** Starting dates for this position are January (preferred), March, or September 1997. Application deadline is 1 November 1996. *Affirmative Action/Equal Opportunity Employer.*

MOLECULAR EVOLUTION POSITION

The Ecology and Evolution Group within the Department of Biology at the University of Oregon invites applications for a tenure-track faculty position in molecular evolution. The specific area of research concentration is open, but priority will be given to candidates focusing on molecular mechanisms of evolution and/or the interface between evolution at the molecular and phenotypic levels. The position will be filled at either the **ASSISTANT** or **EARLY ASSOCIATE PROFESSOR** level. Applicants should submit a cover letter with a brief outline of research and teaching interests and a curriculum vitae, and arrange to have three letters of recommendation forwarded by November 1, 1996, to: **Molecular Evolution Search, Biology Department, 1210 University of Oregon, Eugene, OR 97403-1210.** *The University of Oregon is an Equal Opportunity/Affirmative Action Employer committed to compliance with the ADA and cultural diversity. We encourage women and minorities to apply.*

POSITIONS OPEN

REPRODUCTIVE ECOLOGICAL PHYSIOLOGIST MOLECULAR IMMUNOLOGIST

The Department of Biology, San Francisco State University (SFSU), invites applications for two tenure-track positions at the **ASSISTANT/ASSOCIATE PROFESSOR** level for fall 1997. Ph.D. is required and postdoctoral experience is preferable. Successful candidates must have an established research record, the potential for extramural funding of a research program that includes supervision of M.A. students, and a commitment to excellence in teaching that includes general courses as well as area of specialty. We seek: 1) a physiologist who focuses on the interaction between environment and reproductive systems. We encourage candidates with expertise in comparative endocrinology or neuroendocrinology of vertebrates at either the cellular or organismal level to apply. Teaching responsibilities include upper-division and graduate courses in reproductive physiology and participation in human or animal physiology courses. 2) An immunologist with a background in general immunology and with expertise in regulation of gene expression or the genetics of immune responses. Teaching responsibilities include upper-division and graduate courses in immunology. Send letter of application, curriculum vitae, statement of teaching and research goals, and three letters of reference by November 4, 1996 to either the **Physiology or Immunology Search Committee, Department of Biology, San Francisco State University, San Francisco, CA 94132.** *Women, ethnic minorities, and persons with disabilities are especially urged to apply. SFSU is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION

The Department of Molecular Biology at Vanderbilt University seeks candidates to fill a tenure-track faculty position at the level of **ASSISTANT PROFESSOR**. Preference will be given to candidates with training, experience, and plans for independent research in molecular genetics or molecular genetic approaches to important biological problems. Applicants in other areas of molecular biology that complement the interests of our current faculty may also be considered. (For information about Vanderbilt and the Department, visit our Web site at <http://www.vanderbilt.edu>.) The central criteria are excellence of record and the promise of future excellence in research and in teaching molecular biology at undergraduate and graduate levels. Applicants should send a letter of application, together with a curriculum vitae and a statement of current and future research interests, and should arrange for three letters of recommendation to be sent to: **Prof. James V. Staros, Chair, Department of Molecular Biology, Vanderbilt University, Box 1820 Station B, Nashville, TN 37235 U.S.A.** Review of applications will begin December 1, 1996, and will continue until the position is filled. *Vanderbilt University is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are especially encouraged to apply.*

THREE ASSISTANT PROFESSORS BIOLOGY—CORNELL

Cornell University seeks three **TENURE-TRACK** assistant professors in molecular, cellular, and developmental biology of higher eukaryotes, with a preference for mammalian systems. Two will be in the Section of Biochemistry, Molecular and Cell Biology (BMCB) and one will be in the Section of Genetics and Development (G&D). Both Sections are housed in our modern Biotechnology Building. Applicants should have outstanding research credentials and an interest in teaching. Applicant research areas of particular interest in BMCB include, but are not limited to, nuclear structure and function, cell cycle control, and cellular signal transduction. G&D applicants should have research interests in developmental biology and should be able to teach undergraduate vertebrate developmental biology. Applicants should send a description of research interest, a curriculum vitae, and three letters of reference to: **BMCB and G&D Search Committee, Biotechnology Building, Cornell University, Ithaca, NY 14853.** We will begin to evaluate applications on November 1, 1996 and will continue to entertain applications until the positions are filled. *Cornell is an Equal Opportunity/Affirmative Action Employer.*

DEAN

School of Biological Sciences University of California, Irvine

The University of California, Irvine, invites applications and nominations for the position of Dean of the School of Biological Sciences. We seek an individual with an outstanding reputation within the scientific community who will bring vision and innovative leadership to the School. Candidates must have a demonstrated commitment to academic excellence to further advance the School's standing in research, undergraduate and graduate education, and service. The scholarly achievements of this individual should be appropriate for an appointment as a Full Professor in one of the departments in the School. The School of Biological Sciences comprises four academic departments: Development and Cell Biology, Ecology and Evolutionary Biology, Molecular Biology and Biochemistry, and Psychobiology.

Applications and nominations will be received until the position has been filled. However, the screening process will begin immediately, and individuals are encouraged to apply prior to **November 15, 1996**.

Nominations and expressions of interest, along with a curriculum vitae and the names and addresses of three referees, should be submitted to:

Professor Thomas Poulos
Chair, Biological Sciences Dean Search
University of California, Irvine
509 Administration, Irvine, CA 92697-1000.

The University of California, Irvine is an equal opportunity employer committed to excellence through diversity.



Agricultural Research Service
United States Department of Agriculture

RESEARCH POSITIONS

BELTSVILLE HUMAN NUTRITION RESEARCH CENTER

The United States Department of Agriculture (USDA), Agricultural Research Service (ARS), Beltsville Human Nutrition Research Center (BHNRC), is accepting applications for two permanent full-time research positions:

(1) Announcement Number DB-6-058 for a **Research Chemist/Research Nutritionist/Research Biologist/Research Physiologist** or related discipline (salary range \$37,094—\$95,531). The objective of this position will be to develop an independent research program using metabolic techniques to study the mechanisms of action of phytochemicals as they relate to human nutrition and health. Candidates must have knowledge of human nutrition and either physiology, biochemistry, or molecular biology; knowledge of phytochemical metabolism in humans, animals, or cell systems; and demonstrated experience using methods appropriate for the study of phytochemicals. Specific questions regarding the position may be directed to: **Dr. Judith Hallfrisch, 301-504-8396**.

(2) Announcement Number DB-6-063 for a **Research Molecular Virologist, Research Molecular Biologist, Research Microbiologist**, or related discipline (salary range \$37,094—\$68,729). The objective of this position will be to determine the genetic and molecular basis for the increased virulence observed in a pathogenic virus passed through a nutritionally deprived host (*Nature Medicine* 1:433, 1995). Candidates must have a strong working knowledge of molecular virology, molecular biology, and biochemistry. A Ph.D. in microbiology or related discipline with emphasis on virology is desired. Experience with virus propagation in cell culture and recombinant DNA techniques is essential. Specific questions regarding the position may be directed to **Dr. Orville Levander, 301-504-8504**.

Applicants must be U.S. citizens. To obtain application procedures and a copy of either announcement, please call, visit or write: USDA, ARS, Human Resources Division, 6305 Ivy Lane, Suite 361, Greenbelt, MD 20770, 301-344-8452. The closing date is November 18, 1996. USDA, ARS is an Equal Opportunity/Affirmative Action Employer.

DEAN

COLLEGE OF NATURAL AND AGRICULTURAL SCIENCES

University of California, Riverside

The University of California, Riverside invites applications and nominations for the position of Dean of the College of Natural and Agricultural Sciences. The College is unique in combining the agricultural, biological, biomedical, and physical sciences under one administrative umbrella. Currently, the College is in the process of implementing changes brought about by an extensive strategic planning effort. The Dean will play a significant leadership role in further implementation and continued efforts to meet the demands of 21st century science.

As part of a land grant institution, faculty in the College carry out the three-fold mission of teaching, research, and public service. Currently, the College has an enrollment of 2,753 undergraduates and 516 graduate students in 16 undergraduate and 20 graduate programs in the following academic units: Biochemistry, Biomedical Sciences, Biology, Botany and Plant Sciences, Chemistry, Earth Sciences, Entomology, Mathematics, Nematology, Neuroscience, Physics, Plant Pathology, Soil and Environmental Sciences, and Statistics.

Major research units within the College include the Institute of Geophysics and Planetary Physics, the Statewide Air Pollution Research Center, and the Citrus Research Center/Agricultural Experiment Station. As Director of the Agricultural Experiment Station and Cooperative Extension, the Dean is responsible for the campus-based, mission-oriented programs of the statewide Division of Agriculture and Natural Resources.

The College and the Agricultural Experiment Station hold 683,223 assignable square feet of space and 1,680 acres of agricultural research land; and in addition, administers eight off-campus holdings of the UC Natural Reserve System comprising 28,159 acres. The College and the Agricultural Experiment Station have 243 ladder-rank positions, 22 Cooperative Extension specialists, and 354 budgeted non-academic staff positions. The total College budget is over \$34 million. Approximately one-half of the College budget is allocated to the support of faculty and programs in the Agricultural Experiment Station and Cooperative Extension.

Additional information on the College may be obtained by visiting its Web site at <http://cnas.ucr.edu/>.

The Dean reports to the Executive Vice Chancellor, and through him to the Chancellor of UC Riverside, a comprehensive land-grant research institution. As the most rapidly growing campus within the University of California system, UC Riverside is projected to significantly increase its current enrollment of 9,000 students within the next decade. The Riverside campus affords major opportunity because of its expanding student enrollment and programs and its location in the most rapidly growing region of California.

The Chancellor and faculty seek candidates with a fundamental commitment to academic excellence to lead the college. Applicants must have a distinguished record of research, teaching and public service appropriate to an academic appointment at the level of full professor in the College department of the candidate's discipline, as well as a record of successful leadership and creative management. Salary will be commensurate with experience and qualifications. The target date for starting the position is July 1, 1997.

Review of nominations and applications will begin November 1, 1996 and continue until the position is filled. Nominations and letters of applications, including a resume and the names and addresses of five references, should be sent to: **Chair, CNAS Dean Search Committee, c/o Office of The Chancellor, University of California, Riverside, CA 92521.** UCR is an Equal Opportunity/Affirmative Action Employer.



UNIVERSITY OF CALIFORNIA
RIVERSIDE

POSITIONS OPEN

SYSTEMS NEUROPHYSIOLOGIST

The Department of Physiology at The University of Arizona College of Medicine is beginning a search for a systems neurophysiologist. This tenure-track, fiscal year appointment will be filled at the rank of **ASSISTANT PROFESSOR**. The department teaches physiology to undergraduates and to candidates for the M.S., Ph.D., and M.D. degrees. The faculty studies physiological mechanisms at the molecular, cellular, and system levels, and is particularly strong in the following areas: cardiovascular physiology; comparative physiology; endocrinology; exercise physiology; ion transport; neurophysiology; renal physiology. The successful candidate will be expected to perform the following duties: establish a vigorous, independent research program in systems neurophysiology; teach an upper-division undergraduate course on the neuromechanical basis of movement and exercise; contribute to graduate and medical education in the area of expertise; provide research training to undergraduate, graduate, and postdoctoral trainees; interact with faculty in at least one of the areas of departmental emphasis. Qualifications include the Ph.D., M.D., or equivalent, and two to four years of postdoctoral training. Candidates with demonstrated experience in teaching and grant writing are especially encouraged to apply. Position is available beginning July 1, 1997. Review of applications will begin in October 1996, and continue until the position is filled. Submit a letter of application; a summary of teaching and research interests; a current curriculum vitae that includes the names, addresses, and telephone numbers of at least three references; and at least three relevant reprints to: **Ralph F. Fregosi, Ph.D., Head of the Search Committee, Department of Physiology, The University of Arizona, Tucson, AZ 85724-5051**. More information about the Department of Physiology at Arizona can be found on the WWW (<http://vascular.physiol.arizona.edu/job.html>). *The University of Arizona is an Affirmative Action/Equal Opportunity/ADA Employer.*

JUNIOR AND SENIOR FACULTY POSITIONS

UCSF Cancer Center Cancer Research Institute

The Cancer Research Institute (CRI), a component of the UCSF Cancer Center, invites applications for several new **FACULTY** positions. We seek outstanding investigators trained in the areas of cancer biology, cancer genetics, and molecular therapeutics. Successful candidates will receive appointments in academic departments in the School of Medicine and in its graduate programs. New members of the Cancer Research Institute will join an exciting interactive research environment in state-of-the-art research facilities and participate in the development and implementation of an innovative graduate program in Cancer Biology.

Applicants should send a curriculum vitae, a short statement of research plans, and the names of at least three references to:

Thea Tlsty, Ph.D., Chair
Cancer Research Institute Search Committee
c/o Tracey Lee
UCSF Cancer Center
3333 California Street, Box 1297
San Francisco, CA 94143-1297

The University of California is an Equal Opportunity/Affirmative Action Employer. Minority candidates and women are encouraged to apply.

FACULTY POSITION MOLECULAR/CELL BIOLOGY

The Department of Pathology, Anatomy and Cell Biology at Thomas Jefferson University (TJU), Philadelphia, Pennsylvania, seeks a qualified investigator at the **ASSISTANT PROFESSOR** level to join ongoing NIH-supported studies in signal transduction, gene regulation, and apoptosis. Studies are also in progress, in collaboration with the Jefferson Alcohol Research Center, regarding the effects of alcohol on cell signaling pathways. The new faculty member will be expected eventually to develop an independent research program based on extramural support. Candidates should have an M.D. or Ph.D. degree, with strong postdoctoral research experience in molecular and cell biology. Please send curriculum vitae with the names and telephone numbers of three references to: **Dr. Raphael Rubin, Department of Pathology, Thomas Jefferson University, 233 JAH, Philadelphia, PA 19107. Telephone: 215-503-4517; FAX: 215-955-8703**. Rank and salaries are negotiable, commensurate with experience. *TJU is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN



UCLA TENURE-TRACK FACULTY POSITION Molecular and Cellular Cardiovascular Physiology

The Department of Physiology at the UCLA School of Medicine invites applications for a tenure-track faculty position, preferably at the level of **ASSISTANT PROFESSOR**, for an individual with a Ph.D. and/or M.D. degree interested in applying modern approaches to understand physiology of the cardiovascular system. Candidates are expected to have strong training and background in the biomedical sciences. The successful candidate will be expected to develop an independent research program as part of the UCLA Cardiovascular Research Laboratory and to participate in the teaching mission of the Department. An excellent environment exists in the Laboratory, Department, and School to build an academic career. This includes laboratory space, set-up funds, core resources, and other active research programs in molecular, membrane, cell, and cardiovascular biology. Applicants should send a letter with a statement of research interests and goals, their curriculum vitae, and names of three references to: **Chair, Cardiovascular Search Committee, UCLA School of Medicine, Department of Physiology, 10833 LeConte Avenue, Los Angeles, CA 90095-1751. Email: dmoorehe@physiology.medsch.ucla.edu**. Review of applications will begin on October 30, 1996 and will continue until a suitable candidate has been identified.

The University of California, Los Angeles, is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSORS BIOLOGY

The Department of Biology at the State University of West Georgia seeks applicants for three tenure-earning **ASSISTANT PROFESSORSHIPS**. Two positions are available in the area of cell biology. Candidates for these positions are expected to have expertise in cell biology and either developmental biology or human anatomy. One position is available for a generalist with research interests in the area of innovative teaching of college biology. A Ph.D. and postdoctoral experience are required for each position. Applicants are expected to teach at the undergraduate and graduate levels, to establish a research program in their disciplines that will involve undergraduate and graduate majors, and to participate in the professional activities of the University and their respective scientific disciplines. The appointments are available in September 1997. Salary is commensurate with experience. For information on the University and community connect to our web page at www.westga.edu.

Applicants should submit letters of interest, a current curriculum vitae, statements of teaching and research interests, and three letters of recommendation to: **Chair, Cell Biology (or General Biology) Search Committee, Department of Biology, State University of West Georgia, Carrollton, GA 30118**. All application files should be complete by November 10, 1996. Please direct questions or inquiries to: **Dr. Gregory Stewart, Telephone: 770-836-6547; Email: gstewart@westga.edu**. *The State University of West Georgia is an Affirmative Action/Equal Opportunity Employer and strongly encourages the applications of women and minorities. Georgia is an open records state.*

UNIVERSITY OF WISCONSIN-MADISON Teaching Fellow in the Life Sciences

A position is available immediately for an energetic, dynamic, and creative educator to lead a new program in progressive pedagogy for graduate students in the life sciences. The successful candidate will work closely with a small group of faculty to write grant proposals, organize and teach workshops, and create resources to advance college-level science education. Candidates must have a doctoral degree in the life sciences and must have a strong interest in science education. Applications must present evidence of research productivity, excellent writing and interpersonal skills, and experience in teaching. Salary \$30,000. Application review will begin October 1, 1996. To apply, send a curriculum vitae, names and addresses of three references, a sample of original writing, and a statement of interest to: **Wisconsin Teaching Fellow, Ms. Laurie Luther, Administrative Assistant, Russell Laboratories, 1630 Linden Drive, University of Wisconsin, Madison, WI 53706. Email: L2L@plantpath.wisc.edu**.

POSITIONS OPEN

FACULTY POSITION—BIOCHEMIST

The Departments of Chemistry and Biology of the University of St. Thomas invite applications for a full-time position in biochemistry. It is anticipated that the appointment will be tenure-track with final administrative approval expected in October 1996. The appointment will be made at the **ASSISTANT PROFESSOR** level and the salary will be commensurate with the successful candidate's experience. The starting date is September 1, 1997. Immediate responsibilities will include teaching both semesters of biochemistry lectures and labs. It is essential that the successful candidate have a strong background in organic chemistry. Preference will be given to candidates who additionally have a significant background in biology. Establishment of a vigorous research program accessible to undergraduate chemistry and biology majors is expected and therefore postdoctoral research experience will also be considered a plus. A Ph.D. in biochemistry is required as well as a strong commitment to teaching at the undergraduate level in a liberal arts context. St. Thomas is a coeducational, Catholic university dedicated to the total development of the individual student. Send letter of application; curriculum vitae; statements of teaching philosophy and research plans appropriate for undergraduates; and graduate and undergraduate transcripts, plus arrange to have three letters of reference sent directly to: **Dr. Brad Glorvigen, Chair, Department of Chemistry, Mail Number 5032, University of St. Thomas, 2115 Summit Avenue, St. Paul, MN 55105-1096**. All materials, including letters of reference, must be received by October 28, 1996. *The University of St. Thomas is an Equal Opportunity/Affirmative Action Employer.*

NEUROPHARMACOLOGIST Kansas State University

The Department of Anatomy and Physiology, College of Veterinary Medicine, invites applications for a tenure-track faculty position, at the **ASSISTANT PROFESSOR** level (80% research, 20% teaching). Candidates should hold a Ph.D. in pharmacology or a related discipline and have at least two years of postdoctoral research training. Preference will be given to applicants with research experience in neuroscience and interests that complement existing programs in the department. The successful candidate will have an extramurally funded research program or an established research program with considerable potential for securing extramural funding. The appointee will be expected to develop a graduate-level course related to his or her research interests, and to contribute to a team-taught pharmacology course for veterinary students. The position is available August 1, 1997. D.V.M. and/or Ph.D. required.

Applications should include a curriculum vitae, a statement of research and teaching interests, names and addresses of three references, and reprints of three representative publications. Applications will be received until November 15, 1996 or until the position is filled. Send applications to: **Dr. Jon D. Dunn, Department Head, Department of Anatomy and Physiology, VMS 228, Kansas State University, 1600 Denison Avenue, Manhattan, KS 66506**. *Kansas State University is an Equal Opportunity/Affirmative Action Employer.*

TWO ASSISTANT PROFESSORS THE UNIVERSITY OF TEXAS Division of Pharmacology and Toxicology

Applications are invited for two tenure-track positions at the level of **ASSISTANT PROFESSOR**. We are seeking outstanding individuals who will establish vigorous research programs in the areas of molecular toxicology and/or molecular neuropharmacology, although exceptional candidates in other areas of research will be considered. The Division is undergoing a significant expansion, with these two positions to be filled by fall 1997 and a third position to be filled by fall 1998. Applicants will be expected to attract extramural funding and to participate in the training of graduate and pharmacy students. A Ph.D. and a minimum of two years of postdoctoral experience are necessary. Applicants should provide a letter outlining their specific research interests; a complete curriculum vitae; and the names, addresses, and telephone numbers of three references. Reply to: **Dr. James P. Kehrer, Head, Division of Pharmacology and Toxicology, College of Pharmacy, The University of Texas at Austin, Austin, TX 78712-1074. Email: KehrerJim@mail.utexas.edu**. Deadline for receipt of applications is: November 15, 1996. Additional information about the program may be found at: <http://www.utexas.edu/depts/pharmacology/main.html>.

NATIONAL INSTITUTES OF HEALTH
NATIONAL INSTITUTE ON AGING
GERONTOLOGY RESEARCH CENTER
BALTIMORE, MARYLAND

POSTDOCTORAL FELLOW

The Office of the Scientific Director, National Institute on Aging, is seeking a postdoctoral fellow interested in studying mammalian cell cycle regulation. The candidate should have training in cellular and molecular biology. Experience in protein purification and biochemistry is very helpful. Starting salary will be commensurate with qualifications and experience. For more information, contact Dr. Douglas K. Ferris at (301) 846-1427. Interested candidates should submit a curriculum vitae, relevant reprints, and names of three references to:

NATIONAL INSTITUTE ON AGING
ATTN: KAREN MABEN
PERSONNEL OFFICE, ROOM 1D09
GERONTOLOGY RESEARCH
CENTER, 4940 EASTERN AVENUE
BETHESDA, MD 21224

NIH is an Equal Opportunity Employer

Scientist/Sr. Scientist

The R. W. Johnson Pharmaceutical Research Institute conducts research and development for the pharmaceutical business units of Johnson & Johnson worldwide in the therapeutic areas of anti-infectives, CNS, dermatology, hematology/oncology, immunology, inflammation, and women's health. We have an immediate opportunity at our campus-like facility in CENTRAL NEW JERSEY (midway between New York City and Philadelphia) for a results-oriented and talented candidate to join our Drug Discovery Department and participate in a multi-disciplinary team effort directed toward identifying and exploiting novel targets and approaches for manipulating the immune response.

The successful applicant will have a Ph.D. in Molecular Biology, Molecular Immunology, Immunology or Biochemistry and 3+ years of postdoctoral experience, which must include the application of molecular biological approaches to the study of either T-cell, cytokine or growth factor receptor-mediated signal transduction. The candidate should be well versed in cloning as well as protein expression and characterization. Experience in enzymology and assay development a plus.

We offer a competitive salary and comprehensive benefits including medical/dental insurance, 401(k) plan and our LIVE FOR LIFE Wellness Program with on-site fitness center. To apply, please send a copy of your resume suitable for scanning into our database (i.e. clean/clear, no graphics, and preferably unfolded) to: Dept. 907, Johnson & Johnson Recruiting, P. O. Box 16597, New Brunswick, NJ 08906-6597.

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



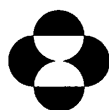
THE R.W. JOHNSON
PHARMACEUTICAL RESEARCH INSTITUTE

a Johnson & Johnson company

CELL BIOLOGIST/ CELL PHYSIOLOGIST

The Department of Cellular Biochemistry & Physiology at Merck Research Laboratories seeks an energetic and creative scientist to join a group studying molecular mechanisms of neuroendocrine secretion. The ideal candidate will have demonstrated expertise in signal transduction research, with an emphasis on the modulatory effects of G-protein coupled receptor activation on excitation-secretion coupling. This position will involve basic research on cellular mechanisms of neuroendocrine function, mechanism of action studies for potential drug development candidates, and conceptualization and implementation of novel screening systems to identify new therapeutically important molecules. This position requires a Ph.D. (or equivalent) and 2 or more years of post-doctoral research experience, with relevant publications.

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#6, P.O. Box 2000, RY 80-A3, Rahway, NJ 07065.** EEO/AA/Employer M/F/D/V.



MERCK
Research Laboratories

RESEARCH UPDATE

American Cyanamid, a division of Fortune 150 American Home Products Corporation, is seeking a highly motivated, innovative senior/research biologist to join the Plant Biotechnology Program at our Agricultural Products Research Center in Princeton, NJ.

Plant Molecular Biologist/Biochemist

We'll look to you to become part of an interdisciplinary team, collaborating directly with protein modelers, enzymologists, and cell biologists. Project focus will be in the design, molecular implementation, microbial and plant expression, and the analysis of modified proteins toward the development of crops with altered traits.

To qualify, you must have a Ph.D. with postdoctoral experience in plant molecular biology/biochemistry, preferably with experience applying protein structure/function analysis within your discipline. Experience in standard molecular biology techniques and enzymology is requisite. Candidates with experience studying protein structure/function relationships, protein/inhibitor relationships, molecular modeling, and/or expression and import of heterologous proteins into plant organelles will be preferred.

We offer an excellent compensation and benefit package, which includes tuition reimbursement and 401(k) savings plan. For consideration, please send resume and references to: American Cyanamid, Agricultural Research Center, P.O. Box 400, Dept. MB/KK, Princeton, NJ 08543-0400. Equal Opportunity Employer m/f/d/v.



POSITIONS OPEN

ORGANISMAL DEVELOPMENTAL BIOLOGIST

The Department of Integrative Biology seeks an innovative, problem-oriented biologist who uses a diversity of techniques to explore the evolution of developmental processes and patterns of evolution in animals with an emphasis on the organismal level. Research areas of interest include, but are not limited to: the genetic, molecular, and cellular bases of the development of form, developmental dynamics (cell/tissue interactions), musculoskeletal development, or comparative ontogenesis. Teaching responsibilities include an undergraduate course in organismal developmental biology, participation in a core course, and the development of graduate seminars in the areas of the candidate's interests.

The position is open to Ph.D. scientists at any level—**ASSISTANT to FULL PROFESSOR**—and will complement the current departmental faculty, which includes evolutionists, physiologists, morphologists, systematists, ecologists, behaviorists, and population geneticists, all of whom work interactively and multidisciplinary. Completed applications must be received by October 31, 1996. The appointment commences on July 1, 1997.

A curriculum vitae, publications, statements of teaching and research interests, and the names of three referees should be sent to:

Search Committee
Organismal Developmental Biologist
Department of Integrative Biology
3060 VLSB Number 3140, University of California
Berkeley, CA 94720-3140

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

ASSISTANT PROFESSOR CHILDREN'S HOSPITAL MEDICAL CENTER

The Laboratory of Basic Cardiovascular Research at Children's Hospital Medical Center (CHMC) invites applications for an **ASSISTANT PROFESSOR** position. The candidate must have an M.D., Ph.D., or M.D./Ph.D.; demonstrated ability for creative research; and an interest in G proteins and ion channels. The applicant should have a strong background in traditional protein biochemistry as well as molecular biology. Successful applicants should have experience in G protein and ion channel protein purification, the generation and testing of polyclonal and monoclonal antibodies, and the yeast two-hybrid system, and broad experience in molecular biology techniques. Applicants should send their curriculum vitae, a list of publications, and a research proposal to:

Professor David E. Clapham
Director, Basic Research Laboratory
Department of Cardiology
Suite 1309
Enders Building
Children's Hospital
320 Longwood Avenue
Boston, MA 02115

Applicants should also arrange to have three letters of recommendation submitted on their behalf. *CHMC is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

DEVELOPMENT FACULTY POSITION

The Department of Biological Sciences, University of Maryland Baltimore County (UMBC), is seeking an outstanding colleague with a Ph.D. and postdoctoral experience, studying fundamental problems in animal developmental biology, for a tenure-track appointment as an **ASSISTANT PROFESSOR**. The successful candidate will develop an externally funded independent research program and contribute to undergraduate and graduate teaching in animal development. The Department offers Ph.D.'s in biological sciences, molecular and cellular biology, and marine-estuarine-environmental sciences. To support its research, substantial modern research facilities and departmental common equipment are available, including a vivarium, confocal microscope/EM facility, flow cytometer, and phosphorimager. Salary and start-up funds are competitive. Submit curriculum vitae; summary of current and future research interests; and the names, addresses, and telephone numbers of three references to: **The Developmental Biology Search Committee, Department of Biological Sciences, UMBC, Baltimore, MD 21250**. UMBC is a suburban public research university within the University of Maryland System (see <http://www.umbc.edu>). *UMBC is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR Plant Carbohydrate Chemistry

The University of Georgia Complex Carbohydrate Research Center has an opening for a **TENURE-TRACK** assistant professor of plant carbohydrate chemistry. We seek a faculty member with an interest in studying the structures of plant cell wall carbohydrates and who will develop an innovative research program in this area. Candidates must have demonstrated creativity in the development of methods for carbohydrate structural analysis and expertise in the purification and analysis of carbohydrates using nuclear magnetic resonance spectroscopy, mass spectrometry, and liquid and gas chromatography. Knowledge of conformational techniques and the use of computers to answer questions about carbohydrate structure and function is highly desirable. Willingness and ability to participate in a multidisciplinary team environment to solve scientific problems is essential. Salary will be commensurate with experience. Applications received by October 20, 1996, will be reviewed at that time; the position will remain open until a candidate is selected. Applicants should send a letter of interest, a curriculum vitae and publication list, a description of research interests, and the names and addresses of four referees to: **Dr. Peter Albersheim or Dr. Alan Davill, Co-Directors, Complex Carbohydrate Research Center, University of Georgia, 220 Riverbend Road, Athens, GA 30602-4712, U.S.A.** The Co-Directors can also be reached via Email: palbersh@mond1.cccr.uga.edu or adavill@mond1.cccr.uga.edu; Telephone: 706-542-4401; FAX: 706-542-4412. *An Affirmative Action/Equal Employment Opportunity Institution.*

PLANT ECOLOGY Position Reopened

The Department of 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. Successful candidate will develop a strong, extramurally funded research program; direct M.S. and Ph.D. students; and teach effectively at both undergraduate and graduate levels.

The successful candidate will contribute to the undergraduate ecology course and teach upper-division and graduate courses in plant ecology. The Department is interested in applicants whose research interfaces/complements existing research interests and who have postdoctoral experience.

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 Bancroft, The University of Memphis, Department of Biology, Campus Box 526080, Memphis, TN 38152-6080. Telephone: 901-678-2592; FAX: 901-678-4746.** Evaluation of applications will begin October 25, 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.

DEVELOPMENTAL BIOLOGIST

Baylor University, a private liberal arts university of 12,000 students, seeks a developmental biologist for a tenure-track position at the **ASSISTANT PROFESSOR** level beginning 1 July 1997. Applicants must have a Ph.D. degree, with postdoctoral experience preferred, and be using current and innovative approaches to solve various questions concerning developmental processes. Position responsibilities: teach courses in embryology/development, in area of specialty, and in the introductory biology sequence; establish a research program that provides strong training and opportunities for undergraduate and graduate students; and participate in departmental and university service activities. Baylor is renowned for excellence in teaching, balanced with quality faculty and student research. Submit, by 15 November 1996, application letter, curriculum vitae, three letters of recommendation, graduate and undergraduate transcripts, statements of teaching philosophy and research interests, and copies of recent publications to: **Prof. Ken Wilkins, Search Committee Chair, Department of Biology, Baylor University, Waco, TX 76798-7388. Telephone: 817-755-2911; FAX: 817-755-2969; Email: ken.wilkins@baylor.edu; World Wide Web: <http://www/baylor.edu>.** *Baylor University is a Baptist university affiliated with the Baptist General Convention of Texas. As an Affirmative Action/Equal Employment Opportunity Employer, Baylor encourages minorities, women, veterans, and persons with disabilities to apply.*

POSITIONS OPEN

ORGANIC AND BIOPHYSICAL CHEMISTS

The Department of Chemistry and Biochemistry at New Mexico State University (NMSU) invites applications for two tenure-track faculty positions at the **ASSISTANT PROFESSOR** level, one in the area of organic chemistry and the other in biophysical chemistry, both effective August 1997. Successful candidates will have the Ph.D. degree and postdoctoral experience. Candidates are expected to participate in undergraduate and graduate teaching in organic chemistry or biochemistry and to be able to participate in general chemistry instruction, and are also expected to establish externally funded research programs. The Department offers the B.A., B.S., M.S., and Ph.D. degrees. Applicants must submit a letter of application, a complete curriculum vitae, copies (unofficial) of undergraduate and graduate transcripts, statements of research and teaching interests, and an estimate of start-up costs, and should arrange to have three letters of recommendation sent to: **Dr. Robert Hoffman, Search Chairman (Organic) or Dr. Peter Lammers, Search Chairman (Biophysical), Box 30001, Department 3C, New Mexico State University, Las Cruces, NM 88003-0001.** Complete applications must be received by October 30, 1996. *NMSU is an Equal Employment Opportunity/Affirmative Action Employer. Offer of employment is contingent upon verification of the individual's eligibility for employment in the United States.*

TRANSPLANT IMMUNOLOGIST

The Heart Failure and Cardiac Transplant Program of the Rush Heart Institute at Rush-Presbyterian-St. Luke's Medical Center is seeking to recruit a full-time, tenure-track faculty member at the **ASSISTANT PROFESSOR** level, to establish an independent research program in the cellular immunology of transplantation. The Rush Heart Failure and Cardiac Transplant Program is part of a large cardiovascular medicine program active in both basic science and clinical medicine. Rush-Presbyterian-St. Luke's Medical Center is a center for the transplantation of all of the vascularized organs and bone marrow. The expansion of the ongoing collaborative investigation among these transplantation programs is an important institutional focus. Joint appointment in an appropriate basic science department is available and encouraged. Support in the form of laboratory space and start-up funds will be made available. The successful candidate will have a strong record of graduate and postdoctoral training, as evidenced by a competitive up-to-date publication record and the demonstrated ability to attract extramural funding.

Interested applicants must submit a curriculum vitae, a statement of research interests, and the names of three references to: **Maria Rosa Costanzo, M.D., Director, Rush Heart Failure and Cardiac Transplant Program, Suite 439, Rush-Presbyterian-St. Luke's Medical Center, 1725 West Harrison, Chicago, IL 60612-3824.**

BEHAVIORAL NEUROSCIENCE

The Department of Psychology at the University of Wisconsin-Milwaukee anticipates an opening in Behavioral Neuroscience beginning in the fall of 1996. The appointment would be tenure-track at the **ASSISTANT PROFESSOR** level. Candidates should have a Ph.D. and significant postdoctoral research experience. Area of specialization is open but outstanding individuals with interests in the neurobiology of learning and memory or sensory physiology are particularly encouraged to apply. For most favorable consideration send curriculum vitae, a statement of research interests, and three letters of recommendation before January 1, 1997 to: **Behavioral Neuroscience Search Committee, Department of Psychology, University of Wisconsin, P.O. Box 413, Milwaukee, WI 53201.** The names of those applicants who have not requested that their identities be withheld and the names of all finalists will be released upon request. *The University of Wisconsin-Milwaukee is an Equal Opportunity/Affirmative Action and ADA Employer. Minority and women applicants are encouraged to apply.*

UNIVERSITY OF CALIFORNIA, IRVINE SCHOOL OF BIOLOGICAL SCIENCES Academic Position Announcements

Occasional openings for academic researchers, postdoctorals, specialists, and lecturers in our Departments of Developmental and Cell Biology, Ecology and Evolutionary Biology, Molecular Biology and Biochemistry, and Psychobiology are posted on the internet at <http://www.bio.uci.edu/>. Inquiries may also be sent by FAX to: **J. Swenson, School of Biological Sciences, UC Irvine. FAX: 714-824-7407.**

University of California, Irvine is an Equal Opportunity Employer committed to excellence through diversity.

Pharmacia & Upjohn, Inc., is a research-based pharmaceutically focused company dedicated to helping people around the world live longer and fuller lives. The Company was formed through a merger of Pharmacia AB and The Upjohn Company and began operating in November 1995. Pharmacia & Upjohn is a provider of human health care and related products, and operates on a global basis. The Company has a corporate management center in London and major research and manufacturing centers in the United States, Sweden and Italy.

Head of Pharmacology Research

Pharmacia & Upjohn AB, Sweden

As Head of Pharmacology at P&U's Research Center in Sweden, you will lead approximately 100 scientific staff who focus their research primarily on endocrine and vascular metabolic diseases. You will provide managerial and scientific leadership which will be key in the Company's ability to initiate and drive new and current research projects. You will have every support to develop and foster external collaboration with academia and other healthcare companies on an international basis.

To fulfill the requirements of this key leadership post, you will have a Ph.D. in Pharmacology or its equivalent and strong research credentials, preferably in metabolic diseases. Well qualified candidates from academia will be considered, but this senior post is ideally suited for a young but established research leader in the pharmaceutical industry who wishes to grow rapidly in our team-orientated and innovative environment. With an established track record of achievement, excellent leadership and interpersonal skills we would expect you to have potential and ambition to grow into more senior roles. Fluency in English is essential.

This is a key post for the company and so it carries an appropriate compensation package and a generous relocation allowance.

For further details please see our home page on the world-wide web or contact the Head of Research in Sweden, Leslie Hudson, via phone +46 8 695 77 10 or E-mail; leslie.hudson@eu.pnu.com.

Please submit your application marked **F96.32** including a detailed CV, research experience, publication list, names and addresses of references to *Lotta Hansing*, Pharmacia & Upjohn AB, Human Resources, S-112 87 Stockholm, SWEDEN or E-mail; lotta.hansing@eu.pnu.com, before 20 October.



**Pharmacia
& Upjohn**

University of Basel, Switzerland

Professor of Molecular Pharmacy

(former chair of Pharmaceutical Chemistry)

The Faculty of Natural Sciences of the University of Basel invites applications for a full professorship in Molecular Pharmacy.

The professorship represents an attractive position in the context of a new interdisciplinary research and teaching unit (Pharmazentrum of the University of Basel and Center of Excellence of the Joint Departements of Pharmacy of the University of Basel and the Federal Institute of Technology in Zurich).

The professorship involves teaching in Pharmaceutical Chemistry according to the Federal Curriculum for Pharmacists in Switzerland and a research focus in the area of

«Targeting Aspects in Drug Synthesis»

This research topic may include the chemical design of new drugs, derivatives of natural compounds, pharmaceutical proteins, and peptides, with focus on improving drug targeting.

Candidates should have an outstanding record concerning research and teaching experience and initiative for a close cooperation with researchers in neighbouring fields. Basel provides unique opportunities to interact and collaborate with well known research institutions such as the Biozentrum of the University, the Friedrich Miescher Institute, the Basel Institute for Immunology, the Swiss Tropical Institute as well as the industrial research laboratories.

The professor is eligible for a rotating chairmanship of the Department of Pharmacy. The candidate should teach in German within two years.

A new research building located between the Biozentrum and the Clinics will be available in the year 2000 and will house both Pharmaceutical Sciences, Molecular Medicine and groups working in the Biotechnology field (Pharmazentrum). Until then, research space is available in the existing building of the Department of Pharmacy.

Women are particularly encouraged to apply.

Applications with C.V. and list of important publications should be sent till November 30, 1996 to the Dekanat der Philosophisch-Naturwissenschaftlichen Fakultät, Missionsstrasse 64, CH-4055 Basel, Switzerland, Fax 41-61-267 30 53. For further information contact Prof. Dr. Hans Leuenberger, Departement of Pharmacy, Totengässlein 3, CH-4051 Basel, Switzerland, Tel. 41-61-261 79 40, Fax 41-61-261 79 07



POSITIONS OPEN

POSITION IN LEARNING AND MEMORY ASSISTANT, ASSOCIATE, OR FULL PROFESSOR DEPARTMENT OF PSYCHOBIOLOGY University of California, Irvine

Department of Psychobiology is seeking outstanding candidates in the field of the neurobiology of learning and memory. Current departmental research emphasizes plasticity with a focus on problems of learning and memory, integrative neuroscience, and aging/neurodegeneration. The successful candidate will be working at the molecular, cellular, systems, or behavioral levels in the area of learning and memory. The level of appointment will be consistent with the candidate's past accomplishments. Send applications (résumé, research plans, and the names and addresses of three potential referees) to: **Learning and Memory Search Committee, Department of Psychobiology, UCI, 2205 Bio Sci II, Irvine, CA 92697-4550.** Applications will be reviewed continuously beginning October 30, 1996.

An Equal Opportunity Employer committed to excellence through diversity.

ASSISTANT PROFESSOR (Job Code 08-15-94-3984)

The Department of Psychiatry, Psychiatric Institute, University of Illinois at Chicago (UIC) seeks a full-time, tenure-track, **ASSISTANT PROFESSOR** in the area of neuroscience with emphasis in gene targeting and regulation of neuronal function. Special consideration will be given to individuals using vertebrate systems to investigate problems related to gene expression in the context of behavioral correlates of transmitter receptor function. Ph.D., postdoctoral experience, a strong record of research accomplishments, and demonstrable potential for interactive collegiality in a multidisciplinary program in neuroscience required. Send curriculum vitae; summary of current and future research plans; and names, addresses, telephone, and FAX numbers of at least three senior investigators as references to: **Chair, Faculty Search Committee, Department of Psychiatry, The Psychiatric Institute, UIC, 1601 West Taylor Street, Room 314W, M/C 912, Chicago, IL 60612. FAX: 312-433-8358.** All inquiries will be held in confidence. Application review will begin November 30, 1996. *UIC is an Affirmative Action/Equal Opportunity Employer.*

VERTEBRATE FIELD BIOLOGIST

Lewis and Clark College invites applications for a tenure-track **ASSISTANT PROFESSOR** position beginning July 1997. We seek an individual who integrates an investigative approach to the study of vertebrates with a strong foundation in natural history. Candidates should be committed to excellent teaching and to developing an externally funded, field-based research program involving undergraduates. The successful applicant will alternate teaching in the core sequence for biology majors and the College's general education program with upper-division courses in two or more of the following areas: animal behavior, vertebrate biology, animal diversity, and/or behavioral ecology. Submit letter of application, curriculum vitae, descriptions of research interests and of teaching interests and philosophy, and three letters of recommendation to: **Chair, Search Committee, Department of Biology, Lewis and Clark College, Portland, OR 97219.** Review of applications will begin on October 31, 1996. *Lewis and Clark College is an Equal Opportunity/Affirmative Action Employer and particularly encourages applications from women and minorities.*

The Department of Molecular Biology and Biochemistry at the University of California, Irvine invites applications for a tenure-track faculty position in the area of computational structural biology. The appointment will be at the **ASSISTANT or ASSOCIATE PROFESSOR** level. The successful candidate will be expected to establish an active research program using computational methods to address fundamental problems in, but not limited to, macromolecular structure and function. There is substantial campus-wide interest in computational biology, and the successful candidate will be offered a courtesy appointment in the Department of Information and Computer Science. Interested applicants should submit a curriculum vitae including the names of at least three references and an outline of future research plans by December 15, 1996 to: **Computational Biology Search Committee, University of California, Irvine, Department of Molecular Biology and Biochemistry, 3205 Bio Sci II, Irvine, CA 92697-3900.**

The University of California, Irvine is an Equal Opportunity Employer committed to excellence through diversity.

POSITIONS OPEN

ASSISTANT PROFESSOR, Biochemistry, tenure-track beginning fall 1997. The Chemistry Department at Lawrence University, a liberal arts college dedicated to excellence in undergraduate education, seeks an energetic and innovative teacher who will also develop a lively research program that addresses significant questions at the interface of chemistry and biology. Computer expertise that enhances current departmental resources is desirable. Teaching responsibilities will include introductory and intermediate chemistry courses, a lab-based biochemistry course for chemistry and biology majors, and interdisciplinary courses such as a college-wide first-year program. Ph.D. required; significant postdoctoral teaching and/or research experience preferred. Send curriculum vitae, teaching philosophy, research interests, three letters of reference, and undergraduate and graduate transcripts to: **M. F. Blackwell, Chair, Department of Chemistry, Lawrence University, Appleton, WI 54912-0599.** Review of applications begins 1 December 1996. *Affirmative Action/Equal Employment Opportunity.*

FELLOW IN THEORETICAL NEUROBIOLOGY

The Neurosciences Institute is an independent, not-for-profit organization at the forefront of research on the brain. Located in La Jolla, the Institute is also the home of the Neurosciences Research Program and serves as an international meeting place for neuroscientists; Fellows have opportunities to interact with visitors from many institutions worldwide.

Applications are invited for positions as **JUNIOR or SENIOR FELLOW** in Theoretical Neurobiology. Since 1987, the Institute has had a research program dedicated to developing biologically based, experimentally testable theoretical models of neural systems. Current projects include large-scale simulations of neuronal networks, the design of behaving automata, and detailed formulations of biologically based models of perceptual systems. Junior Fellows, through collaborations with Senior Fellows and colleagues at the Institute, will have opportunities for advanced training in neural modeling and theoretical approaches to understanding brain function. Fellows in Theoretical Neurobiology will have daily opportunities to interact with Fellows in Experimental Neurobiology at the Institute.

Applicants should be at the postdoctoral (Junior Fellow) or assistant professor (Senior Fellow) level with strong backgrounds in experimental or theoretical neuroscience or related fields. Experience in computer modeling is especially welcome. Positions are available now.

Fellows will receive stipends appropriate to their qualifications and experience. Candidates should send a short statement of research interests, a curriculum vitae, and the names of three references to: **Dr. W. Einar Gall, Research Director, The Neurosciences Institute, 10640 John Jay Hopkins Drive, San Diego, CA 92121.**

MOLECULAR VIROLOGY

T. Jake Liang, M.D.

Current research focuses on the molecular pathogenesis of hepatitis B and C viruses. Elucidation of mechanisms of HBV and HCV infections leading to chronic infection and development of hepatocellular carcinoma is also a major research effort. Several positions are available to study various aspects of molecular virology and viral pathogenesis. Applicants should have a strong background in molecular and cell biology. Candidates with experience in viral and cell immunology, nucleic acid-protein interaction, signal transduction, and transgenic animal work are encouraged to apply. Applicants should have less than three years of postdoctoral experience. Contact: **Liver Diseases Section, Digestive Diseases Branch, NIDDK, Building 10, Room 9B16, 10 Center Drive MSC 1800, Bethesda, MD 20892-1800.**

TWO POSTDOCTORAL FELLOWSHIP/RESEARCH ASSOCIATE positions to investigate regulation of the nitric oxide guanylyl cyclase signaling pathway. One position is for a neuroscientist to investigate NO interactions with anesthesia and analgesia in the central nervous system. Neuropharmacology, neurohistochemistry/autoradiography, and molecular biology experience required. The second position will investigate molecular regulation of lung/vascular nitric oxide synthase and soluble guanylyl cyclase expression. A significant molecular biology background and experience investigating gene regulation is required. Vascular biology experience helpful. Please submit your curriculum vitae and three references to: **Roger A. Johns, M.D., University of Virginia Health Sciences Center, Box 238, Charlottesville, VA 22908 U.S.A.** *The University of Virginia is an Equal Opportunity Employer.*

POSITIONS OPEN

A & PC

A & PC is a rapidly expanding biotechnology company specializing in the development of cancer, AIDS, autoimmune diseases, and complications of organ transplants.

We are currently seeking five qualified, highly motivated individuals to serve as **TECHNICIANS** and five qualified, highly motivated individuals to serve as **SCIENTISTS or STAFF SCIENTISTS** (requires a minimum of three years of postdoctoral experience) to conduct research aimed at understanding the mechanisms of cell cycle regulation. Areas of special interest include mitotic progression checkpoints, microtubule associated proteins and dynamics of spindle formation and degradation. Experience in one or more of the following techniques is highly desirable: fluorescence microscopy, confocal microscopy, video-DIC microscopy, time lapse photography, CCD imaging and image analysis.

Qualifications for each position are as follows: Scientist or Staff Scientist: Ph.D. or equivalent degree and a minimum of five years of work experience in the fields of cell and developmental biology. Technician: B.S. or M.S. and a minimum of three years of work experience in the areas of cell and developmental biology. Salary is commensurate with experience. Send curriculum vitae, three references, and two to three letters of recommendation by October 15, 1996 to:

A & PC

Attention: Human Resources
P.O. Box 130517
St. Paul, MN 55113

POSTDOCTORAL FELLOWSHIP MOLECULAR BIOLOGY OF ACETYLCHOLINE RECEPTORS University of California Davis

A position is available for three years to study the molecular structure of acetylcholine receptors in non-traditional locations. The Ph.D. degree in molecular biology and fluency in the English language are required. Applicants should be proficient in polymerase chain reaction, RNase protection assay, *in situ* hybridization, Northern analysis, and recombinant protein technology to use these and other molecular biological approaches to characterize the nicotinic and the muscarinic classes of acetylcholine receptors expressed by non-neuronal cells inhabiting human skin, and to develop antibodies labeling these receptors in the skin.

We offer a competitive salary and excellent benefit package. Send/fax a cover letter stating career goals, curriculum vitae, and names of references in the U.S.A. to: **Sergei A. Grando, M.D., Ph.D., D.Sc., Department of Dermatology, University of California-Davis, 1605 Alhambra Boulevard, Suite 2300, Sacramento, CA 95816-7051, U.S.A. FAX: 916-734-6793.** *Equal Opportunity Employer.*

POSTDOCTORAL position available for *in vivo* studies of microcirculatory physiology and pathophysiology. Major interests of the laboratory are microvascular regulatory abnormalities associated with hypertension and diabetes. Studies of microvascular growth or regression during pathological conditions may be pursued. Research program is NIH supported. Experience in vascular research is preferred. Send curriculum vitae and letter covering research interests, salary requirements, date of availability, and names and addresses of two references to: **Dr. H. Glenn Bohlen, Department of Physiology and Biophysics, Indiana University Medical School, 635 Barnhill Drive, Indianapolis, IN 46202.**

TWO POSTDOCTORAL POSITIONS THE UNIVERSITY OF CHICAGO HOSPITALS

First position is to investigate pathogenetic derangements in colonic carcinogenesis. Second position is to study the genetics of inflammatory bowel disease. Recent Ph.D. in biology required. Send curriculum vitae and names of three references to: **Dr. Marc Bissonnette, Department of Medicine, GI Section, The University of Chicago Hospitals, 5841 South Maryland Avenue, MC4076, Chicago, IL 60637. FAX: 312-702-2182; Email: mbissonn@medicine.bsd.uchicago.edu.** *Affirmative Action/Equal Opportunity Employer.*

MOLECULAR BIOLOGY ENZYMES

We have an immediate opening for a protein purification specialist with experience in molecular biology enzymes (polymerases) and their applications. Ph.D. with postdoctoral experience preferred. Salary open; medical benefits and relocation expenses paid. Résumé with references to: **Midland Certified Reagent Co., 3112-A West Cuthbert Avenue, Midland, TX 79701.**

University of Basel, Switzerland

Professor of Molecular Medicine

The University of Basel Medical School, the Department of Research of the University Hospital (Kantonsspital) and its clinical units are inviting applications for a Full Professorship in Molecular Medicine and Pathophysiology within the context of a new interdisciplinary focus of the Medical and Natural Sciences Faculties that combines clinical, biological and pharmaceutical research within a common infrastructure and new building (Pharmazentrum).

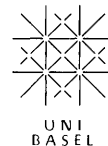
Candidates should have an outstanding research record in the field of molecular mechanisms of disease. Basel provides unique opportunities to interact and collaborate with well known research institutions such as the Biozentrum of the University, the Friedrich Miescher Institute and the Basel Institute of Immunology.

Starting date is January 1997 or negotiable. A new research building located between the Biozentrum and the Clinics will be available in the year 2000 and will house both Molecular Medicine, Pharmaceutical Sciences and groups working in the Biotechnology field (Pharmazentrum). Until then, research space will be available within the Department of Research of the University Hospital (Kantonsspital). Moreover, funds are available for the establishment of tenure track junior groups in Molecular Medicine.

The professorship involves responsibility for teaching in Molecular Medicine (Pathophysiology) and eligibility for the rotating chairmanship of the Department of Research of the University Hospital.

Women are particularly encouraged to apply.

For consideration, send your résumé and list of publications to Dekanat der Medizinischen Fakultät, Kantonsspital Basel, CH-4031 Basel, Switzerland, Fax No. 41-61-265 22 30 until October 15, 1996. For further information contact Prof. Urs A. Meyer, Head of the search committee, Biozentrum of the University of Basel, Dept. of Pharmacology, Klingelbergstrasse 70, CH-4056 Basel, Switzerland, Fax No. 41-61-267 22 08.



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آغا خان یونیورسٹی

THE AGA KHAN UNIVERSITY

Faculty of Health Sciences
Medical College

The Aga Khan University was chartered in 1983, as Pakistan's first private University, committed to high international standards of community-oriented medical and nursing education, research and high quality of health services.

The Department of Physiology and Pharmacology has recently been merged and consists of 11 Faculty members including 4 Professors. Research is currently carried out in various disciplines of Physiology and Pharmacology, particularly in Neuroscience, Cardiopulmonary and Signal Transduction.

The University is in search of outstanding candidates to fill the following positions:

SENIOR INSTRUCTOR DEPARTMENT OF PHYSIOLOGY AND PHARMACOLOGY

Ph.D. or MBBS with M.Sc. or M. Phil. in Physiology or Pharmacology. Applicants with relevant teaching experience will be preferred.

ASSISTANT PROFESSOR (two positions) DEPARTMENT OF PHYSIOLOGY AND PHARMACOLOGY

Ph.D. or equivalent qualification with at least 2-3 years Post-doctoral teaching/research experience. Candidates with expertise in the Cardiovascular System and/or Molecular Cell Biology of Signal Transduction will be given preference, but also applications from related fields will be considered.

Salary and benefits will be offered commensurate with qualifications, experience and level of responsibility. If you are seeking professional growth and an excellent work environment, please send your detailed résumé, bibliography, research and teaching plans, and names and addresses of at least three referees familiar with your recent work history to the Personnel Director, The Aga Khan University, P.O. Box 3500, Stadium Road, Karachi-74800, Pakistan.

POSITIONS OPEN

Three **POSTDOCTORAL RESEARCH** positions available in mechanisms of carcinogenesis of aromatic hydrocarbons and estrogens and cancer risk assessment. Immunologist (Position 1) to study immune mechanisms in tumor promotion. Experience with MAb protection, immunohistochemistry, and *in vivo* assays of immune function. Immunologist (Position 2) to participate in developing molecular dosimetry for chemical-dependent DNA damage and assessment of cancer risk. Experience in hybridoma production, antibody purification, and analytical immunohistochemistry. Biochemist/Molecular Biologist (Position 3) to study repair of DNA adducts and apurinic sites and related mutations. Competitive salary. Send curriculum vitae with names of three references to: **Dr. George P. Casale (Immunologists) or Dr. Eleanor G. Rogan (Biochemist), Eppley Cancer Institute, University of Nebraska Medical Center, 600 South 42nd Street, Omaha, NE 68198-6805.** Affirmative Action/Equal Employment Opportunity.

POSTDOCTORAL POSITION available to study the neuromuscular control of the pharyngeal and nasal airways in anesthetized animals and in human subjects. Position is for one year, with possibility of two more years. Ph.D., M.D., or equivalent required. The ideal candidate will have experience in electrophysiology, respiratory physiology, and small animal surgery. Preference given to candidates who are eligible for a National Research Service Award; i.e. citizens or permanent residents of the U.S. Review of applications begins October 7, 1996 and continues until filled. Send curriculum vitae, including references, to: **Ralph E. Fregosi, Ph.D., Department of Physiology, Gittings Building, University of Arizona, Tucson, AZ 85721-0093.** The University of Arizona is an Affirmative Action/Equal Opportunity/ADA Employer and applications from females and minority members are strongly encouraged.

POSTDOCTORAL RESEARCH ASSOCIATE in project to develop alternate information displays for persons with print disabilities. Requires Ph.D. in science, engineering, or math; professional computer programming ability; and expertise with VRML or other structured languages describing physical objects. See <http://dts.physics.orst.edu> for information on research programs. Send applications including curriculum vitae and names of three professional references by Email (ASCII or LaTeX) or HTML URL by October 11, 1996 to: **Prof. John Gardner, Department of Physics, Oregon State University, Corvallis, OR. Email: gardnerj@ucs.orst.edu.** Oregon State University is an Affirmative Action/Equal Employment Opportunity Employer and has a policy of being responsive to the needs of dual-career couples.

POSTDOCTORAL POSITION available immediately, in NIH-supported research on ovarian function as affected by xenobiotic estrogen-modulating molecules such as dioxins (*Biol. Reprod.*, 55:62-67, 1996). Salary and benefits competitive. Experience in molecular techniques and steroid enzymology desired, and a knowledge of reproductive toxicology is helpful. Send cover letter; curriculum vitae; and names, telephone and FAX numbers, and Email addresses of three references to: **Reinhold J. Hutz, Ph.D., Department of Biological Sciences, University of Wisconsin, 3209 North Maryland Avenue, Milwaukee, WI 53211. Telephone: 414-229-6880; FAX: 414-229-3926; Email: rjhutz@cscd.uwm.edu.**

POSTDOCTORAL POSITION

A **POSTDOCTORAL POSITION** is immediately available to study the molecular mechanisms of dopaminergic neuronal death following neurotoxin administration and transplantation in experimental models of Parkinson's disease. Expertise in quantitative morphology, immunohistochemistry, *in situ* hybridization, PCR, stereotaxic surgery, and grafting techniques is essential. Send cover letter, curriculum vitae, and three letters of recommendation to: **Serge Przedborski, M.D., Ph.D., Department of Neurology, Columbia University, 650 West 168th Street, Room BB-307, New York, NY 10032. Email: sp30@columbia.edu.**

Columbia University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study calcium signaling mechanisms and the regulatory role of nitric oxide. Experience in molecular characterization of signal transduction mechanisms, single cell measurement, and imaging techniques is desirable. Send curriculum vitae and three references to: **Dr. Lubo Zhang, Center for Perinatal Biology, Loma Linda University School of Medicine, Loma Linda, CA 92350. FAX: 909-824-4029; Email: lzhang@ccmail.llu.edu.**

POSITIONS OPEN

POSTDOCTORAL POSITION Mycobacteria Biology

A position is available immediately for a Ph.D. or M.D. with a background in molecular biology to study *Mycobacterium tuberculosis* (Mtb) during pulmonary infections. The project involves isolation of Mtb genes expressed during different phases of infection. Other projects include DNA vaccine development and analysis of T cell responses against pulmonary pathogens. Applicants with background in prokaryotic molecular biology are preferred. Salary negotiable depending on qualifications and experience. Send curriculum vitae and names of three references to: **Rick Lyons, M.D., Ph.D., Assistant Professor, UNM Cancer Research and Treatment Center, 900 Camino de Salud, Albuquerque, NM 87131. Telephone: 505-277-4450; FAX: 505-277-7224; Email: Rlyons@medusa.unm.edu.** University of New Mexico is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL ASSOCIATE SYNAPTIC PLASTICITY

Join ongoing electrophysiological studies of synaptic co-transmission in sympathetic ganglia. This position requires experience in voltage-clamp and an interest in pre- and postsynaptic mechanisms that mediate interactions between nicotinic, muscarinic, and peptidergic receptors (see *J. Physiol.*, 491:413, 1996 and 494:287, 1996). Send curriculum vitae and names of three references to: **Dr. John P. Horn, Department of Neurobiology, E1440 BST, University of Pittsburgh, School of Medicine, Pittsburgh, PA 15261. Telephone: 412-648-9429; Email: JPH+@pitt.edu.** Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

Anticipated availability of one or two positions in the Laboratory of Molecular Psychiatry to work on cloning and neuropharmacological analysis of imidazole receptors. Relevant Ph.D., evidence of research productivity, and expertise in molecular biology are required. Unique opportunity for a creative person to contribute to a new field of study, within an outstanding Division of Neurobiological and Behavior Research. Send curriculum vitae and names and addresses of three references to: **J. E. Pilett, Department of Psychiatry and Pharmacology, Room G128, 2500 North State Street, Jackson, MS 39110. FAX: 601-984-5899.** Equal Opportunity Employer, Minorities/Females/Disabled/Veterans.

POSTDOCTORAL POSITIONS in molecular cardiovascular pharmacology available for recent Ph.D. in pharmacology, physiology, or biochemistry. Project related to molecular pharmacology of purine receptors and the involvement of second messenger systems in vascular smooth muscle and endothelial cells. Salary NIH level. Experience in related field preferred. Send curriculum vitae and three letters of recommendation to: **Dr. S. Jamal Mustafa, Department of Pharmacology, East Carolina University, Greenville, NC 27858. Telephone: 919-816-2736; FAX: 919-816-3203.** Affirmative Action/Equal Employment Opportunity. Accommodates individuals with disabilities. Applicants must comply with the Immigration Reform and Control Act.

POSTDOCTORAL TRAINING AGING RESEARCH

Baylor College of Medicine invites applications for Hankamer Foundation Postdoctoral (Ph.D. or M.D.) **FELLOWSHIPS** in the Huffington Center on Aging. Aging research areas include: cell and molecular biology, cardiovascular sciences, translational research and ethics. Send curriculum vitae, statement of research interests, and three references to: **Huffington Center on Aging, One Baylor Plaza, M320, Houston, TX 77030. Attention: Patricia White.** For more information <http://www.bcm.tmc.edu/hcoa/>.

Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer.

POSTDOCTORAL POSITION/SIGNAL TRANSDUCTION. A position is available now to study the signal transduction pathways in the insulin transduction network and their relationship to insulin action. Requires a strong background in cellular and molecular biology. Ph.D., M.D., or M.D./Ph.D. required. Send curriculum vitae, research interests and goals, and three references to: **Leonard Jarrett, M.D., Hospital University of Pennsylvania, 34th and Spruce Streets, 6 Gates, Philadelphia, PA 19104.** The University of Pennsylvania is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE

Position immediately available in prokaryotic genetics laboratory to study basic and applied aspects of polyhydroxyalkanoate synthesis. Ph.D. and experience in recombinant DNA techniques required. Successful applicant will also supervise undergraduate researchers and teach an occasional lecture. Salary range is \$25,000 to \$28,000, depending on experience and qualifications. Send curriculum vitae and names of three professional references to: **Dr. Douglas Dennis, Department of Biology, James Madison University, Harrisonburg, VA 22807. Email: dennisd@jmu.edu.** James Madison University is an Affirmative Action/Equal Opportunity Employer and specifically encourages applications from women and minorities.

POSTDOCTORAL POSITIONS available at the Argonne National Laboratory (20-minute drive from Chicago, Illinois) and at the Weizmann Institute of Science, Israel. Research in polymerase-DNA and DNA-DNA interactions related to conceptually novel methods of DNA sequencing with modular primer walking. See *PNAS*, 90: 4241-45, 1993; *BioTechniques*, 17:554-558, 1994; and *NAR*, 23:2881-2885, 1995. Development of new techniques for rapid DNA sequencing and mapping. Creative ideas are welcome. Funded by the U.S. Human Genome Program. Contact: **Dr. Levy Ulanovsky, Email: bplevy@weizmann.weizmann.ac.il.**

POSTDOCTORAL POSITIONS available January 1, 1997 (anticipated) to study the regulation of and structure-function relationships in type 1 protein phosphatases from phylogenetically diverse organisms. Experience in one or more of the following areas required: site-directed mutagenesis, protein chemistry, tissue culture. To apply, send curriculum vitae and the names and telephone numbers of two references to: **Peter J. Kennelly, Department of Biochemistry, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061-0308.** Virginia Tech is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIP: Immediate opening in NIH-funded laboratory to examine changes in cell adhesion molecules and intercellular junctions in intraocular inflammatory disease. Published experience in confocal microscopy a must. Experience with *in situ* methods and immuno-EM desirable, as well as interest in learning complementary methods such as freeze-fracture and *in vivo* fluorophotometry. Send curriculum vitae, statement of research interests, plus names of references to: **Dr. Thomas F. Freddo, Boston University School of Medicine, 80 East Concord Street, Boston, MA 02118. Email: tfreddo@acs.bu.edu.**

POSTDOCTORAL POSITION available to study human melanocyte and melanoma-specific genes. Experience in molecular biology/genetics is desirable. Interested candidates should send their curriculum vitae and the names of three references to: **Dorothea Becker, Ph.D., Department of Pathology, University of Pittsburgh, BST E1050, 211 Lothrop Street, Pittsburgh, PA 15213-2582.**

CORONARY PHYSIOLOGY POSTDOCTORAL POSITION

If you wish to investigate the control of coronary blood flow by adrenergic and adenosine-mediated mechanisms in whole animal preparations, please write to us. Include a curriculum vitae and list of references who may be contacted. **Eric Feigl or Keith Kroll, Department of Physiology and Biophysics, University of Washington, Box 357290, Seattle, WA 98195-7290.**

Carnegie Mellon's Department of Engineering and Public Policy (EPP) has **POSTDOCTORAL POSITIONS** in: risk ranking (requires background in risk and experimental social science); uncertainty analysis (requires background in applied decision analysis); climate change impacts; regulatory reform. Résumé to: **Granger Morgan, EPP-BH 129, Carnegie Mellon University, 5000 Forbes Avenue, Pittsburgh, PA 15213.**

POSTDOCTORAL POSITION HARVARD UNIVERSITY

A **POSTDOCTORAL** position is immediately available to study the molecular basis of metabolic disorders in knock-out mice models. Candidates with a strong background in molecular biology should send curriculum vitae with names and telephone numbers of three references to: **Gökhan S. Hotamisligil, M.D., Ph.D., Harvard School of Public Health, 665 Huntington Avenue, Building II, 205, Boston, MA 02115. Email: ghotamis@hsph.harvard.edu.**

icipe Tropical Insect Science for Development



The International Centre of Insect Physiology and Ecology (ICIPE)

POSTDOCTORAL FELLOW (BIOMATHEMATICS)

REF: 70/SE/BIOM/96

(Good salary and benefits package)

ICIPE is an intergovernmental organization funded by various governments, aid agencies, and private foundations to carry out research and training into the environmentally sound and sustainable management of arthropods for improved health and agricultural productivity in the tropics. ICIPE has 300 international and national staff to support its research programme, which comprises two- to three-year projects, so the organization and its employees are constantly changing. The Director General is currently focusing ICIPE's research programme to utilize the available resources more effectively.

To support various research activities, the above-mentioned position within the establishment needs to be filled.

Candidates will provide biomathematical consultation and support services to insect scientists and carry out biomathematical research and training.

Candidates should have a Ph.D. in statistics or applied mathematics with a bias toward biometrics; this Ph.D. programme must have been completed within the last 18 months. An excellent knowledge of SAS package is essential, with continuous experience in using the software. Knowledge of other statistical software packages will be an added advantage. Thorough knowledge of Lotus 1-2-3 and DBase IV is required. Knowledge of other spreadsheet and database software will be an added advantage. Pre-postdoctoral working experience in an agricultural based research centre is desirable.

Salary remuneration is internationally competitive.

Benefits include housing and transport allowance or company car; group life, accident and medical insurance; education allowance; 30 days leave; non-contributory pension scheme; and relocation facilities.

Applications, with full CV and publications list, including the names and addresses with telephone/fax/e-mail numbers of three referees, should be sent before 18 October 1996 to: **Director, Management, ICIPE, PO Box 30772, Nairobi, Kenya, Fax: 254-02-803360/860110; E-mail: icipe@cgnet.com.**

Ambassade de France aux États-Unis
Mission Scientifique et Technologique

The Chateaubriand French Fellowship Program

1 9 9 7 / 1 9 9 8

If ...you are currently working towards your Ph.D in science or engineering, including biomedical and agricultural sciences, or

...you have completed it in the last three years, or

...you have already participated in an exchange program with a French research team or within a university affiliated with the desired host institution in France, you will receive special consideration.



(c) Alain Huron CNRS



Then : ...you may qualify for a fellowship from the French government to conduct research in France, (some of the fellowships are co-sponsored by French companies).

You would conduct research performed in a French university, an engineering school or a public laboratory. Candidates must contact the host institution to secure a position before applying.

Starting in September 1997, fellowships are available for a 6 to 12 month period, with a monthly stipend of **\$1800** for a doctoral fellow, **\$2400** for a post-doctoral fellow. Health insurance and a round trip ticket are also provided.



Fellowship Recipients 96/97 :

Hung Tse CHANG, Harvard School of Public Health.-Melloni COOK, Pennsylvania State University.-Catherine DORNBACH, University of Massachusetts at Amherst.-Patrick DOYLE, Stanford University.-David GRAFF, University of Michigan.-Barry GUIDULI, University of Chicago.-Marc HANSON, UCLA.-Andrew HELD, University of Pittsburgh.-Jacob HOOKER, Northwestern University. Thalia JEFFRES, University of NY at Stony Brook.-Carlos JOVE COLON, Stanford University.-Gregory KING, Michigan State University.-Audrey KIM, MIT.-Elizabeth KUTTesch, Texas A&M University.-Stephen LEE, Emory University.-Jeffrey LOVE, Harvard University.-John LODMELL, Brown University.-Ofer MATAN, Stanford University.-Andrew MURRAY, University of California. at Irvine. James PORTER, University of North Carolina at Chapel Hill.-Anthony PULLEN, University of Florida.-Paul SALVADOR, Northwestern University.-Kathleen SMITH, MIT.-Julianne SMITH, Columbia University.-Richard WASHINGTON, University of Pennsylvania. Kevin WERT, University of Pennsylvania.

Only completed applications received before December 31, 1996 will be accepted. Applicants must be U.S. citizens and registered in a university in the U.S..

For further information, please contact: The Embassy of France, Department of Science and Technology • Email: Chateaubriand@amb-wash.fr • 4101 Reservoir Rd, N.W., Washington DC 20007-2176. Fax: (202) 944-6244.



MAX-PLANCK-INSTITUT FÜR MARINE MIKROBIOLOGIE

The Max Planck Institute for Marine Microbiology, Bremen, Germany, invites applications for a position as

Postdoctoral Scientist

in our Microsensor Group. The group studies the biochemistry of the sediment-water-interface and combines laboratory research with *in situ* analyses using benthic landers during research cruises.

The candidate should have a background in biology or geochemistry and will join research on microbial and chemical processes in the sea floor.

The position is available now and is limited to 3 years with the possibility of extension. The salary is according to the German BAT IIa/Ib.

Applications, including a curriculum vitae, a list of publications, and a short description of future research objectives, are invited within one month to:

Max Planck Institute for Marine Microbiology

Dr. M. Kühl (Head of Microsensor Group)

email: michael@postgate.mpi-mm.uni-bremen.de

FAX: +49-421-2028690

Celsiusstr. 1, 28359 Bremen, Germany

Molecular Biology and Bioinformatics

The positions

3 positions in molecular biology and 1 position in bioinformatics are available in the Central Research unit of Bayer AG.

Your experience

Applicants should hold a higher academic degree (Ph.D. or M.D.). The molecular biology candidates should have profound experience in the cloning and expression of genes. Knowledge in the field of CNS receptors and ion channels as well as postdoctoral experience is desired. Applicants for the bioinformatics position should hold a higher degree in biology and have several years of proven experience in informatics and database management as a member of a gene discovery team.

Our offer

The positions will strengthen Bayer's activity in gene discovery for application in the life science business groups. The applicant will be a member of a dedicated team of scientists and will be working in a creative and productive research environment in one of the largest chemical-pharmaceutical companies.

Your application

Please send your application in the form of a C.V. accompanied by a short letter outlining relevant experience, quoting ref. number 206, to the address shown below.

Bayer AG
Personalmarketing
Geb. 4809
D-51368 Leverkusen
Germany



POSITIONS OPEN

POSTDOCTORAL RESEARCH positions at EPA—Two projects are available at the National Risk Management Research Laboratory (NRMRL) in Cincinnati. One project is on development of computer program to measure progress in pollution prevention resulting from product redesign, reformulation, or replacement. The other is related to development of methodologies for multimedia environmental impact assessment for pollution prevention. Prefer doctoral degree within last three years with a background in toxicology, health or environmental sciences, or engineering. Knowledge of impact assessment also needed. Contact: **Postgraduate Research Program/NRMRL, ETD/ORISE, P.O. Box 117, Oak Ridge, TN 37831-0117. Telephone: 423-576-1083. Reference NRMRL 96-04/05.**

TWO POSTDOCTORAL RESEARCH FELLOWSHIPS IN MOLECULAR BIOLOGY

Applications are invited for two Ph.D. **POSTDOCTORAL FELLOWS** to work on the structure-function of nuclear receptor HNF-4 and its role in apolipoprotein gene expression. Both positions involve application of techniques in molecular biology, bacterial protein expression, and tissue culture, and would suit candidates with particular interest and skill in molecular biology. The positions are available immediately for two to three years and salary support will be at NIH scale.

Applicants should send a curriculum vitae and names and addresses of two referees to: **Dr. M. Hadzopoulou-Cladaras, Section of Molecular Genetics, Boston University Medical Center, 700 Albany Street, CBR-W509, Boston, MA 02118-2394.** Further details can be obtained by Telephone: 617-638-5083; FAX: 617-638-5141; Email: cladaras@bu.edu.

POSTDOCTORAL POSITION—Massachusetts General Hospital and Harvard Medical School, Boston. Fellowship in antibody engineering; molecular biology experience required. Send curriculum vitae, statement of research interests, and telephone numbers of three referees to: **Dr. Michael Margolies, Jackson 1421, Massachusetts General Hospital, Boston, MA 02114.** Telephone: 617-726-8552; FAX: 617-726-4811; Email: margolies@helix.mgh.harvard.edu.

POSITIONS OPEN

POSTDOCTORAL POSITION COX LABORATORY FOR BIOMEDICAL ENGINEERING, RICE UNIVERSITY

A position is available in an NIH-funded program on the effects of hemodynamic forces on blood and vascular cells. The project involves research to elucidate the mechanisms of interaction of endothelial cells, smooth muscle cells, and platelets as influenced by fluid mechanical shear stress and cyclic strain. Some of the work focuses on the mechanisms of regulation of the expression of genes in vascular cells that mediate the synthesis of important vasoactive metabolites. The work is accomplished by an established, interdisciplinary research group of engineers, medical scientists, and basic scientists from Rice University and the Baylor College of Medicine. Send curriculum vitae and two references to: **J. David Hellums, A. J. Hartsook Professor, Cox Laboratory for Biomedical Engineering, Rice University, MS 142, Houston, TX 77005. Telephone: 713-285-5116; FAX: 713-285-5116; Email: jhellums@rice.edu.**

Rice University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available in NIH-funded project to study mechanisms and machinery of RNA editing. Experience in protein biochemistry and/or molecular biology required. Send curriculum vitae and three letters of reference to: **Kenneth Stuart, Ph.D., Seattle Biomedical Research Institute/University of Washington, Department of Pathobiology, Job 96-15, 4 Nickerson Street, Seattle, WA 98109. Equal Opportunity Employer.**

POSTDOCTORAL POSITION(S) to study chemokines and their receptors, structure-function, expression of mutants in cell cultures, functional analysis including signal transduction. Send curriculum vitae and three letters of reference to: **P. E. Kolattukudy, Ohio State University, Neurobiotechnology Center, Rightmire Hall, 1060 Carmack Road, Columbus, OH 43210. Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITIONS are available at the University of Colorado Health Sciences Center (UCHSC), Center for Human Nutrition. This is an NIH-funded interdisciplinary program with mentors from the departments of Pediatrics, Medicine, Physiology, Epidemiology, and Exercise Science. Areas of research include: macro- and micronutrient metabolism, obesity and diabetes, nutrient regulation of gene expression, nutrition and cancers, sympathetic nervous system and aging, lactation and milk secretion, and antioxidants in liver disease. Applicants should have completed degree requirements for the Ph.D. or M.D. degree and should have a strong interest in pursuing careers in nutrition or nutrition-related disciplines. *U.S. citizenship or permanent residency is required.* Interested applicants should send a curriculum vitae, a brief summary of research experience and interests, and the names of three references by November 15, 1996 to: **Michael Pagliassotti, UCHSC, 4200 East Ninth Avenue, C225, Denver, CO 80262. UCHSC is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION available immediately in a growing, NIH-funded laboratory to study excitation-contraction coupling in heart failure. Projects in the laboratory involve analysis of failing human hearts as well as several animal models. Previous experience in protein biochemistry and organ or cell physiology is required; molecular biology in addition to these areas would be an added advantage. Salary commensurate with experience. Send curriculum vitae and the names of three recent references to: **Dr. Christine S. Moravec, Center for Anesthesiology Research, The Cleveland Clinic Foundation, 9500 Euclid Avenue, FF40, Cleveland, OH 44195.**

TWO POSTDOCTORAL positions available immediately, one in enzyme reaction mechanisms and the other in regulation of gene expression in eukaryotes. Both positions involve the study of heme biosynthesis. A strong background in enzymology, protein purification, and/or molecular biology is requested. Send curriculum vitae and names of three references to: **Dr. Gloria C. Ferreira, Department of Biochemistry and Molecular Biology, College of Medicine, MDC 7, University of South Florida, Tampa, FL 33612-4799. FAX: 813-974-5798; Email: gferreir@coml.med.usf.edu.**

Faculty Positions, Anatomy and Cell Biology, University of North Dakota, School of Medicine and Health Sciences

Applications are invited for two tenure track positions at the Assistant/Associate Professor level to begin July 1, 1997. The first position is sponsored jointly by the Departments of Anatomy and Cell Biology, Physical Therapy, and Occupational Therapy, and carries teaching responsibilities in an interdepartmental gross anatomy course for physical and occupational therapy students. Candidates for this position with recent experience in teaching PT/OT anatomy (or other allied health sciences anatomy with emphasis on extremities/function) will be given high consideration. A second position, sponsored solely by the Department of Anatomy and Cell Biology, requires expertise in human histology and cell biology, and developmental anatomy, and the successful candidate will contribute equally to team-taught courses in those fields. Candidates for both positions will be expected to contribute to graduate student education and must have a Ph.D., or equivalent with at least two (2) years of postdoctoral training. Research experience is preferred in cell and developmental biology, molecular biology, and/or related fields. Successful applicants will be expected to carry on vigorous extramurally funded research programs. Review of applications will begin immediately and continue until the positions are filled. Candidates for the first position should send curriculum vitae, descriptions of research and teaching experience, and three (3) letters of reference to **Dr. Edward C. Carlson, Chairman**. Candidates for the second position should send the same information to **Dr. Mark D. Olson, Search Committee Chair, Department of Anatomy and Cell Biology, Box 9037, University of North Dakota School of Medicine and Health Sciences, Grand Forks, North Dakota 58202**. *The University of North Dakota is an equal opportunity/affirmative action employer and invites applications from all qualified individuals.*

**BIOZENTRUM
UNIVERSITY OF BASEL**

Professorship in Structural NMR Spectroscopy

A position is vacant for a Full Professor in Structural Biology. Applications are invited from candidates with demonstrated expertise and accomplishments in modern multidimensional NMR applied to structure, function and dynamics of biomolecules. The successful male or female candidate is expected to develop a strong research program that will complement activities already existing at the Biozentrum in the fields of X-ray crystallography and the various microscopies. A contribution to the teaching at the Biozentrum, both at the undergraduate and graduate levels, is expected. The University provides a core of salaried positions, equipment and running costs.

Applications including a curriculum vitae, a list of publications, reprints of about five representative publications, a short overview of past, present and planned research activities, and a description of teaching experience should be submitted before November 30, 1996, to the Dean of the Faculty of Sciences at the following address:

Dekan der Philosophisch-Naturwissenschaftlichen Fakultät der Universität Basel, Missionsstrasse 64, CH-4055 Basel, Switzerland.

For further information, please contact Prof. Joachim Seelig, Biozentrum, Klingelbergstrasse 70, CH-4056 Basel, Switzerland (Telefon 0041/61 267 21 90; Fax 0041/61 267 21 89; E-mail: seelig1@ubaclu.unibas.ch).



J387213

Department of Physiology & Biophysics

University of California, Irvine

**Postdoctoral Position—
Electrophysiology**

An individual with a strong background in electrophysiology is sought for structure-function studies on a voltage-gated K channel in T-cells, Kv1.3, which is widely regarded as a therapeutic target for immunosuppressive agents. The project involves the use of structurally defined scorpion and sea-anemone peptide ligands of the channel, in combination with electrophysiological, molecular biological, and molecular modeling methods, to map the topology of the ion conduction pathway (e.g. Aiyar et al, *Neuron* 15:1168-1181, 1995). This information will be used to guide the synthesis and characterization of non-peptide Kv1.3 antagonists that mimic the peptide ligands and take advantage of the four-fold symmetry of the channel.

Send curriculum vitae and references to: **K. George Chandy, Department of Physiology and Biophysics (gchandy@uci.edu), Medical School, Room 291, Joan Irvine Hall, University of California, Irvine, CA 92697.**

University of California, Irvine is an Equal Opportunity Employer committed to excellence through diversity.

NFR Naturvetenskapliga forskningsrådet
Swedish Natural Science Research Council

Box 7142, 103 87 Stockholm Tel 08-454 4200 Fax 08-454 42 50
invites applications for

SENIOR RESEARCH POSITIONS in

Applied Quantum Chemistry

Computational Plasma Physics

The position is focused on computationally intensive theoretical problems in fusion and/or space plasma physics research. When evaluating applications, consideration will be given to achievements in theoretical plasma physics research using numerical computation as well as to the ability to develop new numerical models, methods, and codes.

Experimental Particle Physics at ATLAS

Inorganic Synthesis and Characterization of Cluster

Ore Genesis

The position is focused on studies of epigenetic goldbearing systems in the Fennoscandian Shield emphasizing isotope geochemical, petrological, and structural aspects.

Theory for Highly Correlated Systems in Condensed Matter Physics

The position is focused on the theory of collective quantum mechanical effects in condensed matter systems, where perturbation theory using uncorrelated ground states does not correctly describe the physics, e.g., high temperature superconductors, quantum Hall systems, Luttinger liquids, and spin chains, including defects in these.

The Council's intention in creating these positions is to contribute to the recruitment of researchers and to the renewal of research in Sweden. The programme is aimed primarily at scientists with a doctorate and several years of postgraduate research. The positions are held for three plus three years and are placed at appropriate university departments in Sweden to be chosen in consultation between the candidates, NFR, and the universities. The universities decide on tenure. Duties can commence from July 1, 1997. The salary range will correspond to that of an assistant/associate professor (SEK 300,000-360,000 per year, i.e. USD 46,000-55,000 per year).

A curriculum vitae including a list of publications, a short research plan plus a description of scientific achievements (max. 5 pages), and a maximum of 10 reprints of scientific papers should be appended. Other documents that the applicant wants to refer to could also be included. Four copies of the application and all appendixes and reprints should be submitted.

Applications should reach the **Swedish Natural Science Research Council, Box 7142, S-103 87 Stockholm, Sweden**, by December 1, 1996. Further information can be obtained from **Ms Natalie Lunin** at the Secretariat of NFR, phone no. +46 8 454 42 32, fax no. +46 8 454 42 50.

NEW ENGLAND BIOLABS Postdoctoral Positions

New England Biolabs, a world leader in the production of restriction endonucleases and other related products for the recombinant DNA field, seeks applicants for:

Biochemist/Geneticist

A postdoctoral fellowship is available in January, 1997 for a recent Ph.D. to study protein splicing. Experience in protein engineering, biochemistry, or genetics is required. The candidate will join our team of researchers working on the control of protein splicing and its applications in protein engineering and genetics. Send a resume and three references to: Dr. Francine Perler.

Molecular Parasitologist

A postdoctoral fellowship is available now to study filarial immunophilins, their role in development and as potential targets for chemotherapy. The candidate should have experience in molecular biology and biochemistry. Send a resume and three references to: Dr. Clotilde Carlow.

NEB offers competitive salaries, benefits, and a bonus plan. Attendance at national meetings, publication of research results and open communication is encouraged.

New England Biolabs, Inc.
32 Tozer Road
Beverly, MA 01915

An Equal Opportunity Employer



NEW ENGLAND
BioLabs Inc.

GRANT

LEUKEMIA RESEARCH FOUNDATION GRANTS

The Leukemia Research Foundation, Inc. announces that funds are available to support leukemia-related research. The goal of the grant program is to support new investigators; preference will be given to applicants proposing new lines of investigation. Currently two types of grants are being funded: research grants and postdoctoral fellowships. Grants and fellowships are for a one-year period, and may be renewable for a second year. **DEADLINE FOR RECEIPT OF COMPLETED GRANT APPLICATIONS IS FEBRUARY 15, 1997.**

Research Grant Policies:

1. Eligibility is restricted to investigators who are staff members of a university, hospital, or non-profit research institute. The applicant must be less than five years beyond the end of training at the time of the proposed starting date of the grant award.
2. Maximum budget request is \$35,000. The funds may not be used for salary support of the principal investigator.

Postdoctoral Fellowship Policies:

1. Maximum budget request is \$23,000. The funds are used for the fellow's salary support.
2. Eligibility is restricted to postdoctoral trainees with an M.D. or Ph.D. degree. The fellow must have no more than three years of postdoctoral training (excluding medical residency) at the time of the proposed starting date of the grant award.

For further information and applications, contact:

Hollis R. Brownstein, Chairman
Medical Advisory Committee
Leukemia Research Foundation, Inc.
4761 West Touhy Avenue, Suite 211
Lincolnwood, Illinois 60646
phone: 1-847-982-1480
fax: 1-847-581-0779

**Wanted: Committed, ambitious scientist.
Must be a team player with a vision for
the future. M.D./Ph.D., Ph.D., M.S. or
B.S. degree necessary.**

Does this describe you?

If it does, then plan to attend the bioSCIENCE Career Fairs sponsored by SCIENCE. The bioSCIENCE Career Fairs offer the perfect opportunity for scientific professionals to meet in person with representatives from top biotechnology and pharmaceutical companies, universities, governmental agencies and institutions.

Next 1996 bioSCIENCE Career Fair

Palo Alto, CA on the Stanford Campus in Palo Alto, Oct. 4-5
Tresidder Memorial Union/Oak Lounge and Cypress rooms

Oct. 4: 11 am - 4 pm
Oct. 5: 11 am - 3 pm

Do not contact Stanford University directly. They are not responsible for organizing this event.

To pre-register, please submit your resume or CV via fax: (202) 289-6742, or via e-mail: bioscience@aaas.org. Please remember to bring multiple copies of your CV or resume with you to the Career Fairs, a copy will be necessary to register. Admission to the event is free.

**bioSCIENCE
CAREER FAIRS**

bioSCIENCE Career Fair Information On-Line:
<http://www.sciencemag.org>
(Choose SCIENCE Classified Advertising from the menu)

POSITIONS OPEN

UNIVERSITY OF CALIFORNIA, IRVINE ENVIRONMENTAL SCIENCE Camille and Henry Dreyfus Postdoctoral or Visiting Scientist Position

The successful candidate will participate in research, classes, and seminars in atmospheric chemistry for a period of one to two years. A Ph.D. in chemistry or chemical engineering is required, but prior experience in atmospheric chemistry is not. Research areas in which the individual can choose to work include field measurements of hydrocarbons and halocarbons, laboratory studies of heterogeneous tropospheric chemistry, or laboratory studies of the interaction of oxidant air pollutants with pulmonary surfactant. Participating faculty include Professors F. S. Rowland, J. C. Hemminger, and B. J. Finlayson-Pitts. Collaborations with other research groups are available as well. Annual stipend is \$35,000. Applicants should send their curriculum vitae, including a list of publications, along with the names, addresses (including Email), and telephone numbers of three references by December 15, 1996 to: Ms. Barbara Yu, Administrative Assistant, Department of Chemistry, University of California, Irvine, CA 92697-2025. The University of California is an Equal Opportunity Employer committed to excellence through diversity.

POSTDOCTORAL POSITION available immediately for NIH-sponsored project to study eicosanoid biology in the skin. Research projects examine the role of eicosanoids in ultraviolet light induced cutaneous inflammation and skin cancer. Current work focuses on determination of signaling mechanisms in UV induced apoptosis, cell cycle progression, and DNA damage and repair. Mechanisms underlying the regulation of cross talk between prostaglandin receptors and the enzymes involved in controlling prostaglandin synthesis in the skin are also under study. Techniques used to address these questions include transgenic animals, as well as molecular and biochemical techniques and assays. Applicants should have a strong background in molecular biology.

Send curriculum vitae and names of three references to: Dr. Alice Pentland, Department of Dermatology, P.O. Box 697, 601 Elmwood Avenue, Rochester, NY 14642. FAX: 716-271-4715.

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POSTDOCTORAL POSITION University of Michigan Medical School

Study the immunological and myelopoietic defects in mice deficient in selectin ligands (see *Cell*, 86:643, 1996), and in other systems where the function of leukocyte and/or endothelial cell surface glycoproteins is under investigation using molecular, cell biological, transgenic, and gene ablation approaches (see *JBC*, 270:21437; *JBC*, 270:25047; *JBC*, 269:15162). Qualified candidates will possess a Ph.D. and/or M.D. degree, and will have a strong background in biochemistry, genetics, developmental biology, immunology, or myelopoiesis. Send curriculum vitae, letter of application including research interests, and three letters of reference to: University of Michigan Medical School, MSRB, Attention: Dr. John B. Lowe, Room 3510, 1150 West Medical Center Drive, Ann Arbor, MI 48109-0650. Email: JohnLowe@UMich.edu. Equal Opportunity Employer.

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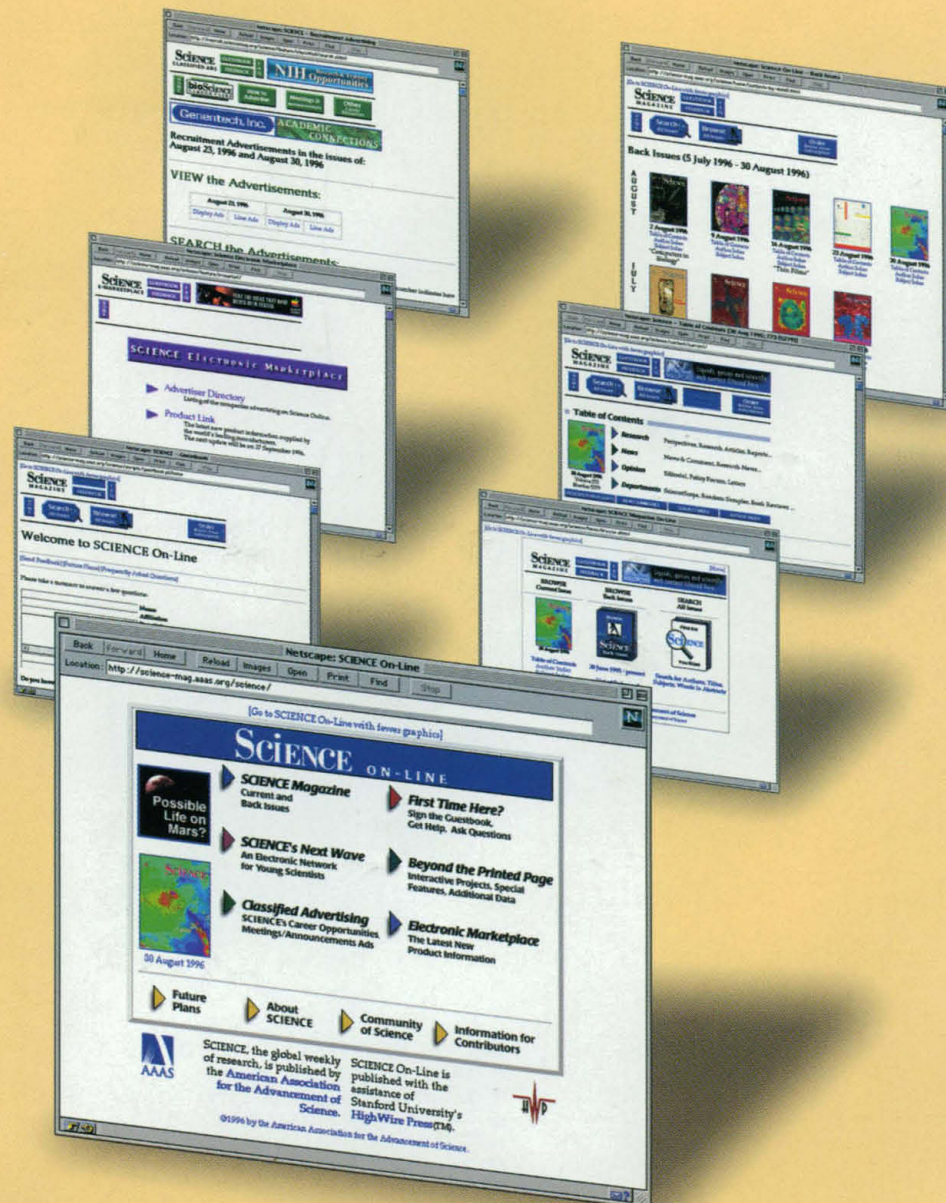
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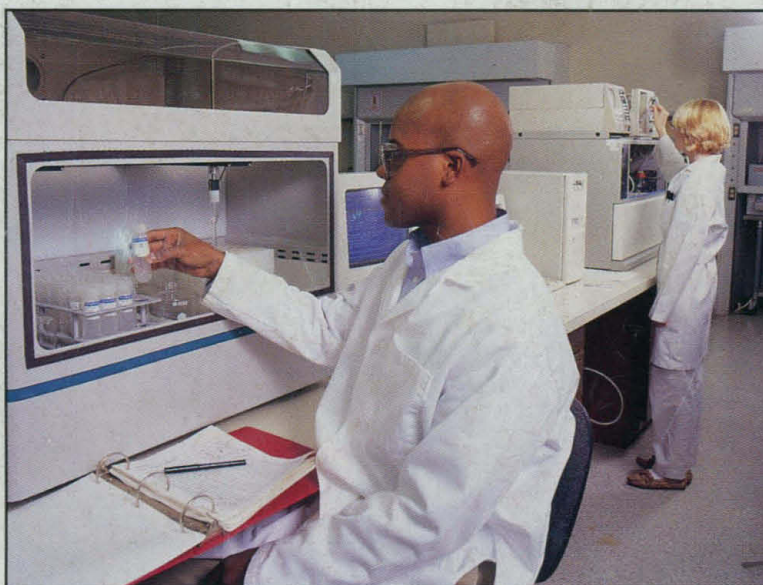
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