Products & Materials

Computer Vision Software

CREAM is a powerful personal computer vision software that digitizes images using a video camera and a framegrabber at a resolution of 512 by 512 pixels in 256 gray levels and displays in 640 by 480 pixels with 256 colors on a VGA system. Images can be stored on disk, exported to word processors, or printed in up to 64 gray levels on a laser printer. The system operates on an IBM AT (or compatible) with DOS 3.1 or higher. A hard disk, mouse, and video graphics array adapter and monitor are required. The program is modular, allowing upgrading to more applications, including bacteria colony counting, automatic reading of DNA sequences from x-ray film, scanning one-dimensional gels, and reading the results of enzyme-linked immunosorbent assays. Bio Trek. Circle 493.

Custom Peptide Synthesis

CLONTECH Laboratories offers custom peptide synthesis services. The company uses solid-phase, continuous-flow methodology and Fmoc chemistry to obtain highquality, resin-cleaved crude peptides. Highperformance liquid chromatography (HPLC) purification is offered, yielding purities greater than 95%. Chemical modification, conjugation to protein or other immunological carriers, product scale-up, and special purification services are also available. With the specified peptide or peptides, customers receive an HPLC chromatogram and amino acid analysis data. CLONTECH Laboratories. Circle 494.

Monoclonal Antibodies

The latest addition to T Cell Sciences' line of monoclonal antibodies (MAbs) to the human T cell antigen receptor (TCR) is Diversi-T $\gamma V2(a)$. This MAb identifies the $V\gamma 2$ epitope of the human $\gamma\delta$ TCR. It can be used in flow cytometry analysis of live cells, immunohistology protocols, immunoprecipitation procedures and protein immunoblot procedures, and in investigations of lymphoid malignancies, autoimmune disease, and immune system disorders. T Cell Sciences. Circle 495.

PharMingen has expanded its line of conjugated MAbs specific for murine lymphocyte cell surface markers to include the following TCR V region-specific MAbs: V β 3, V β 5.1 and 5.2, V β 6, V β 7, V β 8.1 and 8.2, V β 9, V β 11, V β 13, V β 17a, V α 3.2, V α 11, V γ 2, V γ 3, and V δ 4. The following specificities are also available: IL-2 receptor, CD69, LPAM-1, LECAM-1, NK cells, heat stable antigen (J11d), and BP1/6C3. PharMingen. Circle 496.

MAbs specific for murine CD3- ϵ (145-2C11) are also available. PharMingen. Circle 497.

Sample Preparation Kits

A Detergent Removal Kit and a Buffer Purification Kit provide an opportunity to try various methods of preparing samples for optimizing a particular analytical method. The detergent kit simplifies removal of nonionic and anionic detergents from samples. The buffer kit contains all the materials required to deionize impure urea, formamide, glyoxal, or acrylamide to provide reagents acceptable for use in electrophoresis or other procedures that require extreme purity. It also provides materials and protocols for removal of trace organics, interfering anions, and metal ions. Bio-Rad Laboratories. Circle 498.

Tracking Software

Locate II is an interactive triangulation program for field biologists tracking animals equipped with radiotransmitters. The software uses Lenth maximum likelihood estimators to estimate location and 95% error ellipses. The program is interactive, featuring easy-to-use data entry screens and popup help screens. Locate II runs on IBMcompatible computers. Pacer Computer Software. Circle 499.

Phosphorylated Protein Enrichment Kit

The PhosphoGel Enrichment Kit offers researchers a convenient way to isolate or enrich phosphorylated proteins, peptides, and amino acids. The kit includes prepacked activated columns that have a high binding capacity for both phosphoamino acids and phosphoproteins. The kit includes



reagents and buffers sufficient to perform 20 enrichments and purifications. Pierce. Circle 503.

Molecular Biology Buffers and Reagents

AccuGENE is a new line of certified-pure molecular biology buffers and reagents for a wide range of DNA and genetic research applications. Each lot of AccuGENE solution is formulated with ultrapure water, screened and certified to be free of contaminating enzymes. Whittaker Bioproducts. Circle 504.

Literature

A Resource Guide to Steady-State Environmental Rooms provides an overview to aid in environmental room selection and includes information regarding room construction, specifications, applications, safety, instrumentation, and accessories. Thermotron Industries. Circle 506.

Aldrich Safety Products is a catalog listing more than 2000 products in five sections: personal protective equipment, monitoring equipment, storage and handling equipment, response equipment, and reference materials. Aldrich Chemical Co. Circle 507.

ADI 1030 Bio Controller gives the features, specifications, and applications of an instrument for the control of conditions for the cultivation of cells and microorganisms. The instrument is designed for process control in autoclavable bioreactors where available bench space is limited. Applikon. Circle 508.

FluoroMax Spectrophotometer is a brochure on a low-cost, research-grade spectrofluorometer that combines ease of use with high sensitivity. Spex Industries. Circle 509.

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

Personnel Placement

LINE CLASSIFIED ADVERTISEMENTS

DEADLINES: Ads are due by Thursday, 10 a.m., 2 weeks prior to the issue date. *Science* publishes each Friday, except the last Friday of the year Advertisements must be submitted in writing.

HOW TO SUBMIT A CLASSIFIED AD: Prepare double-spaced typewritten ad copy on a separate sheet. Do not include any abbreviations. *Science* will edit and typeset ads according to *Science* guidelines. Deadline for applications stated in ad must be at least 2 weeks after date of publication. Also include a cover sheet which gives name and phone number of contact person, desired date of publication, and billing information, including any special invoicing requests. Mail or FAX materials to:

SCIENCE Classified Advertising 1333 H Street, N.W., Room 940 Washington, DC 20005 Telephone: 202-326-6555 FAX: 202-682-0816

CLASSIFICATIONS: Science publishes line classified ads under the following headings: Positions Open, Employment Agencies, Situations Wanted, Courses and Training, Meetings, Announcements, and Marketplace. Advertisers should specify classification desired.

HOW TO CALCULATE RATE FOR CLASSIFIED AD: Ads are \$41 per line with a \$410 minimum One line equals 52 characters and spaces; centered headings equal 32 characters and spaces.

To ESTIMATE ad cost, count total number of 52 character lines and multiply by \$41 to find approximate cost of ad per week. Each line of centered heading counts as one line. Also count one line for white space between headline and first line of text; all partial lines are also counted as full lines (including all centered reply information).

Remember, this is a rough estimate only. Allow for variation between estimated typewritten lines and ads when actually typeset for magazine. Therefore, purchase orders must allow additional funds for flexibility and/or adjustment. *Science* cannot provide proofs of typeset ads.

PREPAYMENT DISCOUNT: A 3% cash discount is granted to all prepaid line ads. Prepayment made in U.S. dollars by checks drawn on U.S. banks is required on all foreign ads.

CREDIT CARDS: Science accepts **MasterCard** and **VISA.** Both personal and corporate cards may be used. Prepayment does not apply to credit cards.

BOXES AND LOGOS: Any line classified ad can be boxed and/or published with logo to increase its visibility on page. Since the box takes up additional space, one line now equals 48 characters and spaces: two additional lines will be added to allow for top and bottom rules in age are billed bearding to the number of lines without the light space.

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

DISPLAY PERSONNEL ADVERTISEMENTS

For rates, deadlines, and information about fractional display ads (all ads 1/6 page and larger) and all **Marketplace** listings of available products and services, contact:

Scherago Associates 1515 Broadway New York, NY 10036 Telephone: 212-730-1050 FAX: 212-382-3725

CONDITIONS: Personnel advertising is accepted only with the understanding that the advertisers do not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap, or sexual preference. *Science* reserves the right, at its discretion, to decline to publish advertisements submitted to it and to decline classifications which it considers misleading.

POSITIONS OPEN

ASSISTANT PROFESSOR, MOLECULAR BI-OLOGY. Well-trained molecular biologist to join active research laboratory investigating the regulation of gene expression by cytokines and growth factors. Knowledge of gene cloning and sequencing, DNA transfection, library construction, site-directed mutagenesis, S1 nuclease mapping, footprinting, and other molecular techniques required. Send curriculum vitae, research experience, and names of three references to: Thomas B. Tomasi, M.D., Ph.D., Roswell Park Cancer Institute, Elm and Carlton Streets, Buffalo, NY 14263. An Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSORS CELLULAR AND MOLECULAR BIOLOGY

Two tenure-track positions are available in the Laboratory for Cancer Research at Rutgers University. Candidates with outstanding research and teaching ability in areas dealing with the molecular and cellular biology of the cancer cell are encouraged to apply. Areas of particular interest include mechanisms of carcinogenesis, factors influencing the stability of the cancer cell phenotype, regulation of oncogenes, suppressor genes, growth factors and cell differentiation, and the influence of normal cells on cancer cells. Members of the department have strong interests in the areas of chemical carcinogenesis, mutagenesis, cancer prevention, and xenobiotic metabolism. Applicants should send curriculum vitae, copies of significant publications, a summary of current and future research plans, and the names of three references to: Dr. Allan H. Conney, Director, Laboratory for Cancer Research, College of Pharmacy, Rutgers University, P.O. Box 789, Piscataway, NJ 08855–0789. An Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR. Ph.D. degree or equivalent; 2 to 3 years of postdoctoral experience in physiol-ogy and cellular biology, molecular biology, neuro-Science, immunology, and genetics is required. Applicants with established research in the following specific areas will be considered: cardiovascular physiology, regulation of cerebral circulation, exercise physiology, control of pulmonary circulation, coronary micro-circulation and large coronary artery function, renal physiology, mechanisms involved in the neural control of renal function, examining the role of insulin in the central nervous system, transgenic mice as models in hypertension and atheroscierosis research, and development of important cell lines for renin gene regulation. Candidate must have proven track record of research and demonstrated ability to establish and maintain an active independent research program. A track record of external funding is desirable. Research activities will be commensurate with the interest and the demonstrated ability of the applicant. The applicant will be expected to partici-pate in teaching activities of the Department of Medi-cine. Salary will be competitive and will be based on the applicant's qualifications and responsibilities. The University of Iowa is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply. Submit curriculum vitae, a brief summary of current and Sournit curriculum vitae, a brief summary of current and future research interests, and names of three references to: Randall W. Jordison, Assistant to the Chairman, Department of Internal Medicine, The University of Iowa College of Medicine, SE309 GH, Iowa City, IA 52242. Applications will be considered through 31 August 1991.

ASSISTANT OR ASSOCIATE PROFESSOR

The Department of Physiology and Pharmacology at The University of South Dakota (USD) is seeking candidates for one and possibly two tenure-track positions. Candidates should have a Ph.D./M.D. and postdoctoral experience. Special consideration will be given to individuals with research interest in the cardiovascular, nervous, or endocrine systems but other areas will be considered. Associate professor applicants should have an established, independent research program while assistant professor applicants will be expected to develop a strong research program. Duties will include participation in the teaching programs. Interested persons should send curriculum vitae, statement of research interests, and the names of three references to: Ainsworth Hagen, Ph.D., Chair, Department of Physiology and Pharmacology, USDSM, Vermillion, SD 57069. The closing date is 27 May 1991 or until a suitable candidate is identified. Salary is commensurate with qualifications. USDSM is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

UNIVERSITY OF PENNSYLVANIA SCHOOL OF MEDICINE

The Department of Biochemistry and Biophysics plans to appoint a tenure-track **ASSISTANT PROFESSOR** with research interests in the area of molecular evolution, RNA catalysis, and metabolic engineering. Candidates should submit curriculum vitae and statement of research interests and have three letters of recommendation sent to: Dr. Franz Matschinsky, Department of Biochemistry and Biophysics, 414 Anatomy-Chemistry Building, University of Pennsylvania, Philadelphia, PA 19104–6059. Deadline for applications is 15 June 1991. The university is an Equal Opportunity/Affirmative Action Employer.

The Division of Radiation Biology of the Department of Radiation Oncology is seeking a **RESEARCH AS-SISTANT PROFESSOR** to work in collaboration with Dr. Martin Brown on molecular methods of predicting the radiation sensitivity of solid tumors. The division is seeking an individual with training in radiation and/or cancer biology and with experience in such molecular techniques as pulse-field gel electrophoresis, Northern, Southern and Western blots, gel shift assays, hybrid construction, in situ hybridization, etc. This nontenure line position is co-terminous with grant support and is a term appointment (with no possibility of promotion) for a maximum of 6 years. *Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates*. Applicants should submit curriculum vitae and names of three references to: Dr. J. Martin Brown, Director, Division of Radiation Biology, Department of Radiation Oncology, Stanford University School of Medicine, Stanford, CA 94305–5468.

UNIVERSITY OF MIAMI SCHOOL OF MEDICINE (UMSM) DEPARTMENT OF NEUROLOGY MOLECULAR NEUROBIOLOGIST

Applications are invited from M.D. or Ph.D. molecular biologists and molecular geneticists at the ASSIST-ANT OR ASSOCIATE PROFESSOR level, interested in neurological and/or neuromuscular diseases. Tenure decisions will be based upon candidate's qualifications. M.D.'s must be Board-eligible/certified and eligible for a Florida Medical License. A VAMC appointment is available if desired. Applicants should have an established research program using molecular genetics techniques to investigate neurological function and disease. This is an exciting growth position in a department with extensive existing neuroscience research programs. Collaborative opportunities in UMSM are excellent, with several large molecular biology and molecular genetics groups.

Applications with curriculum vitae, names of three references, and copies of five recent publications to: Walter G. Bradley, D.M., F.R.C.P., Professor and Chairman, University of Miami School of Medicine, Department of Neurology (D4-5), P.O. Box 016960, Miami, FL 33101. The University of Miami is an Equal Opportunity/Affirmative Action Employer.

POSITIONS AVAILABLE IN MOLECULAR BIOPHYSICS

The School of Arts and Sciences of the Homewood Campus of The Johns Hopkins University is expanding its interdepartmental program in molecular biophysics spanning the Departments of Biology, Biophysics, and Chemistry. Applications are invited for two tenure-track faculty positions in this area of scientific research at the rank of ASSISTANT, ASSOCIATE, OR FULL PROFESSOR, depending on the credentials of the candidate. We are seeking individuals with expertise in the area of macromolecular structure determination, particularly by high-field NMR and single crystal x-ray crystallography. The successful candidates are expected to develop internationally competitive research programs and augment the graduate and undergraduate teaching of the molecular biophysics curriculum at this campus. Interested applicants should mail their curriculum vitae, summary of research plans, representative publications, and names of three referees to: Sandra Taylor, Search Committee in Molecular Biophysics, School of Arts and Sciences, 102 Macaulay Hall, Homewood Campus, The Johns Hopkins University, Charles and 34th Streets, Baltimore, MD 21218.

The Johns Hopkins University is an Equal Opportunity/ Affirmative Action Employer.

MOREHOUSE SCHOOL OF MEDICINE ASSISTANT/ASSOCIATE PROFESSOR MOLECULAR BIOLOGY OR IMMUNOLOGY

Morehouse School of Medicine (MSM) seeks candidates for a position in molecular biology and/or immunology, at the level of assistant or associate professor. The appointment will be made in a basic science or clinical department appropriate to the academic qualifications and interests of the appointee. Applicants should have a Ph.D. and/or M.D. degree.

have a Ph.D. and/or M.D. degree. Candidates for associate professor should have well-established, independently funded research programs and several years of medical/graduate school teaching experience. Candidates for assistant professor should have strong

Candidates for assistant professor should have strong research training, including postdoctoral experience, evidence of productivity and independence in research, and some teaching experience. Morehouse School of Medicine is an expanding, new,

Morehouse School of Medicine is an expanding, new, private medical school with a strong commitment to the academic and scientific growth of minority students. The position is offered subject to expected funding of

The position is offered subject to expected funding of a research development grant. Applications should be received by 15 July 1991,

Applications should be received by 15 July 1991, should include curriculum vitae, a statement of research interests including grant history, and the names, addresses, and telephone numbers of at least three references. Send applications to: Thomas E. Norris, Ph.D., Senior Associate Dean, Morehouse School of Medicine, 720 Westview Drive, S.W., Atlanta, GA 30310–1495.

UNIVERSITY OF MIAMI SCHOOL OF MEDICINE (UMSM) DEPARTMENT OF NEUROLOGY NEUROVIROLOGIST

Applications are invited from M.D. or Ph.D. neurovirologists at the **ASSOCIATE OR FULL PROFES-SOR** level to direct the new neurovirology section of the Department of Neurology. Tenure decisions will be based upon candidate's qualifications. A VAMC position may be available. Applicants should have an established laboratory research program in neurovirology, preferably concentrating on retroviruses. M.D.'s must be Boardeligible/certified, and eligible for a Florida Medical License. This is an exciting growth position in a department with extensive existing neuroscience research programs, including an AIDS Center, and Neuroimmunology Program. Collaborative opportunities in UMSM are excellent, with extensive research groups in virology, immunology, and molecular biology.

are excellent, with extensive research groups in virology, immunology, and molecular biology. Applications with curriculum vitae, names of three references, and copies of five recent publications to: Walter G. Bradley, D.M., F.R.C.P., Professor and Chairman, University of Miami School of Medicine, Department of Neurology (D4-5), P.O. Box 016960, Miami, FL 33101. The University of Miami is an Equal Opportunity/Affirmative Action Employer.

DEPARTMENT OF CELLULAR BIOLOGY UNIVERSITY OF GENEVA FACULTY OF SCIENCES

Applications are invited for one/two professorships (FULL PROFESSOR, possibly adjunct professor) in cell biology.

sings (FUL FROPESOR, possibly adjunct professor) in cell biology. These professorships will be available in the new Department of Cell Biology at the University of Geneva. This department is accommodated in a modern biology building. The successful candidates will be expected to activities in both undergraduate and conducts

The successful candidates will be expected to participate in both undergraduate and graduate teaching, and to establish a strong independent research program. Applications are particularly invited from candidates whose areas of research interests include: control of proliferation and development, cellular interaction and communication, intracellular traffic, compartmental interactions, organelle biogenesis, cell motility, and cyto-architecture. However, outstanding biologists whose research interests are outside of these areas will also be considered. The language of instruction is French, but a period of adjustment to this requirement can be granted. The proposed starting date is January 1992, but this is negotiable. Applications should be sent by 31 July 1991 to: Secrétariat de la Faculté des Sciences, Université de Genève, 30 quai Ernest-Ansermet, CH-1211 Geneva 4, Switzerland, where inquiries can also be obtained.

POSITIONS OPEN

UNIVERSITY OF ALABAMA AT BIRMINGHAM (UAB)

The Department of Cell Biology in the schools of medicine and dentistry at UAB is seeking a molecular biologist to fill a tenure-track position at the level of **ASSISTANT, ASSOCIATE, OR FULL PROFES-SOR.** Applicants should have a Ph.D. or equivalent degree, postdoctoral experience, and appropriate evidence of research productivity. Candidates using molecular biological approaches to address problems in all areas of cell biology will be considered. Duties will include a modicum of teaching in either histology or neuroanatomy, teaching graduate courses, the training of Ph.D. candidates, and the development of a strong, extramurally funded research program. Salaries and startifications and experience. Applications, including the names of three references, current curriculum vitae, and a summary of research plans should be sent by 30 June 1991 to:

Dr. Gerald M. Fuller Department of Cell Biology University of Alabama at Birmingham UAB Station

Birmingham, AL 35294–0005 The University of Alabama at Birmingham is an Equal Opportunity/Affirmative Action Employer.

ENDOWED CHAIR IN ORNITHOLOGY JAMES FORD BELL MUSEUM OF NATURAL HISTORY UNIVERSITY OF MINNESOTA

The University of Minnesota, Twin Cities Campus, invites applications and nominations of distinguished scientists for the newly endowed Breckenridge Chair in Ornithology at the rank of tenured **ASSOCIATE** or **FULL PROFESSOR**. Qualifications include: an outstanding record of scholarly achievement, a strong record of extramural support, and a vigorous research program in ornithology. The Bell Museum is committed to the establishment of strong research and teaching programs with a focus on the most recent advances in comparative avian biology and conservation. The successful candidate will be expected to conduct a vigorous research program, to teach, and to contribute to the museum's public programs. The endowment was established through broad public support and the person selected will have high visibility in the community. Tenure will be in one of the academic departments of the College of Biological Sciences, most probably Ecology, Evolution, and Behavior.

Applications should include curriculum vitae, reprints, a statement of research interests, and names of at least three references and be sent to: Breckenridge Chair Search Committee, Bell Museum of Natural History, University of Minnesota, 10 Church Street S.E., Minneapolis, MN 55455. Applications will be accepted until 1 October 1991.

The University of Minnesota is an Equal Opportunity Educator and Employer.

UNIVERSITY OF KANSAS MEDICAL CENTER DIRECTOR, CENTER ON AGING

The director will be a physician/scientist, skilled administrator, and the provider of leadership in the field of aging at the University of Kansas Medical Center. He/she is charged with managing the resources of the Center on Aging, recruitment of personnel, and directing the research, service, and educational activities. The director reports to the vice chancellor for health programs and policy of the Medical Center and coordinates issues related to academic program and recruitment with the deans of the schools. The director's area of specialization is open and applicants from all disciplines in aging are encouraged to apply. This tenure-track position will provide appropriate departmental rank and appointment. Compensation will be commensurate with the candidate's qualifications and experience. Applications should be submitted by 30 June 1991. Address responses to: Daniel Stechschulte, M.D., Chairman, Search Committee, c/o Debra Lammers, University of Kansas Medical Center, Office of the Executive Vice Chancellor, 2nd Floor, Murphy Building, 39th and Rainbow Boulevard, Kansas City, KS 66103.

The University of Kansas Medical Center is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

MARY WASHINGTON COLLEGE SENIOR LECTURER OF BIOLOGY

Mary Washington College invites applications for a 1-year temporary full-time (12-hour course load) teaching position in the Department of Biological Sciences. Responsibilities beginning 15 August 1991 will include teaching three sections of introductory biology and laboratories and serving as the laboratory manager of the introductory biology course. Candidates should have Ph.D. (or equivalent experience) and a strong commitment to undergraduate teaching. The college is a small state-supported liberal arts and sciences, coeducational institution located 50 miles south of Washington, D.C. *Mary Washington College is deeply committed to Affirmative Action and encourages women and minorities to apply*. Please send curriculum vitae, three letters of reference, and transcripts by 24 May 1991 to: Dr. Michael L. Bass, Chair, Box 615, Department of Biological Sciences, Mary Washington College, Fredericksburg, VA 22401–5358.

Equal Employment Opportunity/Affirmative Action.

ENDOWED CHAIR IN ENVIRONMENTAL SCIENCE

Troy State University is seeking a highly qualified environmental scientist to fill a newly established endowed chair as part of the State of Alabama's Eminent Scholar Program. The chairholder will expand environmental science at Troy State University by enhancing the current undergraduate program and developing a highquality graduate degree program. The chairholder will develop curricula to prepare students for environmental careers in education, business, industry, and government. In addition, the chairholder is expected to secure outside funding and to establish linkages with the public and private sector.

The basic qualifications are an earned doctorate in an appropriate academic discipline and a commitment to teaching and research in addition to creditable applied experience. A generalist is preferable to a narrow specialist. This is a tenure-track position within the College of Arts and Sciences. Salary is competitive. Appointment date is fall term 1991. Interested applicants should submit a letter of application, curriculum vitae, transcripts, and a list of references not later than 31 July 1991 to:

> Dr. Philip T. Rosen, Dean College of Arts and Sciences c/o Office of Personnel Services Troy State University Troy, AL 36082

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

CLINICAL LABORATORY MANAGER HUMAN EMBRYOLOGY

IVF Australia requires a laboratory manager for the Assisted Reproduction Program at United Hospital in Port Chester.

Since commencement of operations in 1986, the Port Chester Program has developed into one of the most successful assisted reproduction programs in the greater New York area with more than 600 treatment cycles completed annually. Responsibilities include management, quality assurance, and direct participation in the operations of human embryology, andrology, and endocrine assay laboratories. Experience in management and training of technical staff together with demonstrated technical expertise are essential. Applications from candidates possessing supervisory experience in an accredited clinical assisted reproduction program in lieu of a formal postgraduate qualification are encouraged. Applications should reach **Reina Schiffrin, Executive**

Applications should reach Reina Schiffrin, Executive Director, IVF Australia Program at United Hospital, 406 Boston Post Road, Port Chester, NY 10573 (FAX: 914-939-0589) no later than 31 May 1991.

IVF Australia is an Equal Opportunity Employer providing a nonsmoking work environment.

CHEMIST. INSTRUCTOR-LEVEL position in radiopharmaceutical development, from planning through synthesis, purification, and biological testing. Must have background in organic synthesis. Experience with radiochemicals preferred. Must be able to assist in biological work. University of Connecticut Health Center, Farmington, CT 06032. Telephone: 203-679-3120. An Affirmative Action/Equal Opportunity Employer, M/W/H.

UCLA Department of Physiology Faculty Position

Regulatory and Integrative Physiology

We wish to appoint someone studying how cellular or molecular processes are governed by functional needs, such as those of the whole animal. We are not particularly concerned with what particular system the candidate studies. Instead, we seek someone with broad interests and perspective, demonstrated capacity to connect different levels of organization, and the ability to interact with physiologists studying various systems and organizational levels. The candidate may be either (1) a cell/molecular biologist accustomed to relating findings to higher level constraints, or (2) an organ, system or wholeanimal biologist accustomed to relating findings to cell/molecular mechanisms. In addition, the appointee will be expected to participate actively in the teaching mission of the department.

The search is without regard to level of appointment: established senior as well as junior candidates will be considered. Candidates should send a curriculum vitae, statement of interests, and 2-3 representative published papers, and the names of three referees, to:

> Regulatory Search Committee Department of Physiology UCLA School of Medicine Los Angeles, CA 90024-1751

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

National Institute of Neurological Disorders and Stroke Position in Medical Imaging Physics

The Neuroimaging Branch, NINDS, National Institutes of Health, has an opening, at the post-doctoral or assistant professor level, for a scientist to work on the physics and mathematics of medical imaging technologies. Facilities include three (soon five) Magnetic Resonance Imaging (MRI) scanners, two animal MRI-spectroscopy scanners, a variable field NMR relaxometer (under construction), a number of NMR spectrometers and four Positron Emission Tomography (PET) scanners.

Current research interests of the Branch include the magnetic properties and effect on MRI of ferritin and other *in vivo* iron compounds, the theoretical and empirical dependence on field strength of NMR relaxation times T1 and T2 of normal and pathological brain tissue, NMR spectroscopy of brain tumors, and the study of neurotransmitter systems using positron-emitting tracers. New research areas may be initiated by the successful applicant.

Qualified minority candidates are encourage to apply. Please send C.V. and statement of research interests to:

Rodney A. Brooks, Ph.D. Neuroimaging Branch Building 10, Room 1C451 National Institutes of Health 9000 Rockville Pike Bethesda, MD 20892 301-496-6801



U.S. Citizenship required NIH is an Equal Opportunity Employer

Molecular Biology

The reasons to join Pfizer keep growing.



Pfizer Inc is an international leader in the research and development of health care products. The Department of Molecular Genetics Research plays a vital role in the drug discovery research process. Thus, in addition to being integral members of an innovative research department, our molecular biologists are also important constituents of our drug discovery teams.

Our approach to drug discovery encourages individual creativity as an important element in guiding a team effort toward a therapeutic target. This philosophy results in an environment that is challenging to the individual while enhancing group productivity. Scientific growth and development are stimulated by frequent interactions with prominent scientists in academia and medicine as well as with members of the research community within Pfizer.

Due to the continuing expansion of the department, there are several positions for PhD Molecular Biologists. You are expected to have completed at least two years of post-doctoral studies and to have an excellent record of published research. In addition, candidates are required to provide three references which speak to their scientific innovation and independence.

cDNA Library Construction

You should have proven expertise in the construction of cDNA libraries and the use of innovative screening strategies to identify novel genes. Experience in generating subtraction libraries and expression cloning would be distinct advantages.

Transgenic Animals

In recognition of the important role transgenic animals play in modelling a variety of human diseases, Pfizer is developing a transgenic animal group within the Molecular Genetics Department. You should be proficient in constructing transgenes and in the various techniques for generating transgenic animals.

We offer a stimulating research environment and an excellent opportunity for professional recognition and advancement. In addition, we provide a competitive salary/benefits package and an opportunity to live in an attractive Connecticut shore community. Qualified applicants should submit their resume and references in confidence to: Dr. Jerry K. Larson, Assistant Director, Employee Resources, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340. An equal opportunity employer.



Central Research Bringing science to life.

IMMUMEX®

ASSOCIATE DIRECTOR, CLINICAL RESEARCH

Immunex Corporation is a Seattle pharmaceutical company focused on the research, development, manufacturing, and marketing of products to treat immune system disorders. We are seeking qualified candidates to join our Clinical Affairs Group as an Associate Director, Clinical Research.

The successful candidate will be responsible for managing the direction, planning, execution and interpretation of human clinical phase I-III trials for products under development. This individual will establish and approve scientific methods for design and implementation of clinical protocols and final reports. This position interacts with various internal and externals groups to insure adherence to protocols, coordination of report submissions to the FDA and assists in the preparation of INDs and PLAs.

Board qualified M.Ds with post graduate training in infectious disease or clinical immunology plus a strong commitment to clinical research are encouraged to apply. Experience should include a minimum of 7 years related experience in the pharmaceutical industry, clinical research or specialty practice. Candidates with 2 plus years of directly related clinical trial experience with human therapeutic products in a pharmaceutical or biotechnology company, and previous experience designing and/or monitoring human clinical trials are preferred. Good communication skills and the ability to work in a collaborative environment are essential.

Immunex Corporation offers a fast paced, stimulating environment, competitive salaries and an excellent benefits package. For consideration, please submit C.V., names of three references, and a list of publications to:

IMMUNEX CORPORATION, Attn: Human Resources Dept., 51 University Street, Seattle, WA 98101, Fax: (206) 587-0606. Equal Opportunity Employer

HEMATOPOIESIS RESEARCH

Senior Scientist

offmann-La Roche has gained a strong international reputation for making important contributions in the medical arena. Our commitment to continued success has created an opportunity in our Immunopharmacology Department at our Nutley, New Jersey Headquarters.

You will establish a research laboratory to help in the discovery and development of new hematopoietic growth factors in collaboration with Roche scientists possessing expertise in areas such as cellular immunology, molecular biology and protein biochemistry. Both academic interactions and publication of results are encouraged.

A PhD and/or MD and at least two years of post-doctoral experience in the field of hematopoiesis research are required. A strong research background in cytokine regulation of hematopoiesis is preferred.

We offer an attractive compensation package including a salary commensurate with experience, a generous bonus plan and liberal benefits. For consideration, please send your resume, indicating present salary (those without this information will not be acknowledged), to: Mrs. Eleanor M. Malone, Staffing and Employee Services, Department EM111BB, Hoffmann-La Roche Inc., Nutley, New Jersey 07110. We are an equal opportunity employer.



CHAIR

Department of Biochemistry Emory University School of Medicine

Emory University School of Medicine invites nominations and applications for the position of Chair of the Department of Biochemistry. Responsibilities include the direction, management, and continued development of a department committed to excellence in research and teaching in a university setting. The faculty has teaching responsibilities for the M.D. degree program of the Medical School and also for the Ph.D. degree programs offered through the Graduate School of Arts and Sciences and Division of Biological Sciences. The department is located in new modern facilities in the Rollins Research Center on the Emory Campus adjacent to the U.S. Centers for Disease Control. The Department includes 16 full-time faculty engaged in a variety of research programs. Candidates must hold an M.D. or Ph.D. degree with training in biochemistry, and have a strong record in research. Previous academic and administrative responsibilities are required, as well as demonstrated leadership capabilities. Salary is negotiable. Applications and nominations should include a current curriculum vitae and names and addresses of three references. They should be submitted to the Biochemistry Search Committee, 404 Woodruff Health Sciences Center Administration Building, Atlanta, Georgia, 30322. The Search Committee will review applications through July 31, 1991, or until the position is filled

EMORY UNIVERSITY IS AN EQUAL OPPORTUNITY/ AFFIRMATIVE ACTION EMPLOYER



U.S Citizenship required NIH is an Equal Opportunity Employer

Provost

Duke University invites applications and nominations for the position of Provost. The Provost at Duke is the chief academic officer of the University and reports directly to the President. Applicants should have experience as a tenured faculty member in a major college or university, as well as some academic and budgetary responsibility for a major component of an educational institution.

Interested persons should write to: **Roger C. Barr, Chair, Provost Search Committee, Department of Biomedical Engineering, 136 Engineering Building, Duke University, Durham, NC 27706.** Include a complete curriculum vitae with the names of four references. Applications should be received before August 15, 1991.

Buke University

Duke University Is An Equal Opportunity/ Affirmative Action Employer

CHAIRPERSON POSITION IN VIROLOGY AND IMMUNOLOGY

Applications and nominations are being sought for the position of Chairperson, Department of Virology and Immunology, Southwest Foundation for Biomedical Research.

The Foundation is a non-profit, basic biomedical research institution located in San Antonio, Texas. The department has a staff of 59 persons, of whom eight are doctoral level scientific staff members and nine are post doctoral scientists. Strong research programs in hepatitis, AIDS, SAIDS, and Simian B virus are underway.

The successful candidate will hold the George C. Hixon endowed Chair. A Ph.D. or M.D. degree with a distinguished research career in virology or immunology is required. Strong administrative and communicative skills are essential.

Interested individuals should send a curriculum vitae, statements describing interest and administrative experience, and the names, addresses, and telephone numbers of three references.

Send application to:

Dr. Henry C. McGill, Jr. Search Committee Chairman Southwest Foundation for Biomedical Research P.O. Box 28147 San Antonio, TX 78228-0147 Equal Opportunity Employer M/F.



President & Scientific Director *The John P. Robarts Research Institute*

The John P. Robarts Research Institute, an independent medical research institute affiliated with the University of Western Ontario and University Hospital in London, Ontario, Canada is seeking a new President and Scientific Director to take office in the summer of 1992. Reporting to the Board of Directors, the President and Scientific Director is the Chief Executive Officer and has both scientific and administrative responsibility (through a Vice-President, Administration) for the Institute.

Currently, there are three Research Groups related to specific diseases and the functioning of specific organs of the body (Heart and Circulation, Stroke and Aging, Immunology and Transplantation). There are also three Research Groups that are technology-oriented: Clinical Pharmacology, Advanced Imaging Research, and the Clinical Trials Resources Group.

Applications are requested from individuals who have a scientific background that is, or has been, recognized internationally in basic and/or clinical science. Individuals who have taken a leadership role in a scientific environment that encourages cooperation between basic scientists and clinicians will find the Institute a particularly rewarding environment. This is an outstanding opportunity to achieve personal growth and satisfaction in an internationally recognized research institute.

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RESEARCH

INSTITUTE

Toronto, Ontario M5H 3B7 Fax (416) 359–1882 In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents. Expressions of interest should be accompanied by a curriculum vitae, and will be treated in absolute professional confidence. Please direct your response to the address shown to the left.

THE UNIVERSITY OF ADELAIDE - SOUTH AUSTRALIA

invites applications from both women and men for the following position:

PROFESSOR OF CROP PROTECTION (Tenurable) (Ref: 8787) in the DEPARTMENT OF CROP PROTECTION within the Faculty of

Agricultural and Natural Resource Sciences, located at the Waite Agricultural Research Institute. Applications are invited for the Chair of Crop Protection which becomes vacant in January 1992 upon the retirement of Professor A Kerr, FRS, FAA. The Waite Agricultural Research Institute is situated on a delightful campus about 7km from the city centre. General facilities are excellent. Also on the campus are the CSIRO Divisions of Horticulture, Soils and Water Resources, as well as the Australian Wine Research Institute. The Department of Crop Protection is concerned with research, scholarship and teaching in plant pathology, entomology and weed science, with increasing emphasis on the use of molecular approaches to attacking problems of agricultural importance. The appointee should have distinguished research and teaching interests in one of these areas and provide leadership in teaching and in the further development of an active postgraduate research school.

The Faculty of Agricultural and Natural Resource Sciences is located across two campuses, at the Waite Institute and Roseworthy Agricultural College. The Department of Crop Protection is located at the Waite Campus but provides teaching for students on both campuses.

Further information concerning the Department and duties of the post may be obtained from the Dean of the Faculty, Professor HW Woolhouse, Telephone (61 8) 372 2201, Fax (61 8) 338 2744.

It is University policy to encourage women to apply for consideration for appointment to tenurable academic appointments. Holders of full-time tenured or tenurable academic appointments have the opportunity to take leave without pay on a half-time basis for a specific period of up to ten years when this is necessary for the care of children. **INFORMATION** about the general conditions of appointment and selection criteria may

be obtained from the Director, Personnel Services at the University. SALARY per annum: \$AUS 67,812

APPLICATIONS, IN DUPLICATE, quoting reference number 8787 and giving full personal particulars (including whether candidates hold Australian permanent residency status), details of academic qualifications and names and addresses of three referees should reach the Director, Personnel Services at the University of Adelaide, GPO Box 498, Adelaide, South Australia, 5001, Telex UNIVAD AA 89141. Facsimile (61 8) 223 4820 not later than 30 June 1991.

The University reserves the right to make enquiries of any person regarding any candidate's suitability for appointment, not to make an appointment or to appoint by invitation. THE UNIVERSITY OF ADELAIDE IS AN EQUAL OPPORTUNITY EMPLOYER.

UNIVERSITY OF MŁAMI SCHOOL OF MEDICINE (UMSM) DEPARTMENT OF NEUROLOGY NEUROIMMUNOLOGIST

Applications are invited from M.D. or Ph.D. neuroimmunologists at the ASSOCIATE OR FULL PRO-FESSOR level to direct the neuroimmunology section of the Department of Neurology. Tenure decisions will be based upon candidate's qualifications. A VA/MC position may be available. Applicants should have established laboratory research programs and clinical interests. M.D.'s must be Board-eligible/certified and eligible for a Florida Medical License. This is an exciting growth position in a department with extensive existing neuroscience research programs, including MS, AIDS, and the neuromuscular diseases. Collaborative opportunities in UMSM are excellent, with extensive research groups in immunology, virology, and molecular biology.

UMSM are excellent, with extensive research groups in immunology, virology, and molecular biology. Applications with curriculum vitae, names of three references, and copies of five recent publications to: Walter G. Bradley, D.M., F.R.C.P., Professor and Chairman, University of Miami School of Medicine, Department of Neurology (D4-5), P.O. Box 016960, Miami, FL 33101. The University of Miami is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN MICROBIOLOGY. The Department of Microbiology, Immunology and Parasitology (MIP) at the Louisana State University (LSU) Medical Center has a tenure-track opening for an assistant professor. Minimum qualifications include a Ph.D. degree and 3 years of postdoctoral experience. The successful applicant will establish an active and funded research program employing modern problem-solving approaches in microbiology. Additionally, he/she will participate in graduate student training, and share in the department's teaching duties within the medical center. The LSU Medical Center is a modern institution located conveniently in downtown New Orleans. The department has a great deal of shared equipment and also houses the institutional bio-instrumentation facility which provides oligonucleotide and peptide synthesis, preparative HPLC, peptide microsequencing, FACS, Phosphorlmager analysis, mass spectrometry, and monoclonal antibody production. Salary and rank will depend on qualifications and experience. Applicants should submit curriculum vitae, brief descriptions of their research plans, and the names of at least three references to: Dr. Ronald B. Luftig, Head, Department of MIP, LSU Medical Center, 1901 Perdido Street, New Orleans, LA 70112–1393. LSU is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

LABORATORY INSTRUCTOR, PHYSIOLOGY

The University of North Dakota School of Medicine, Department of Physiology, is seeking to fill a nontenuretrack, 9-month laboratory instructor position with a starting date of 15 August 1991. A master of science degree in physiology is required and a Ph.D. is preferred. Salary is dependent on academic degree. This is a 75% time position. The person is expected to supervise GTAs in the undergraduate laboratory as well as setup the laboratory and develop new laboratory experiments and teach part-time in an undergraduate level course in physiology (occupational therapy, physical therapy, physical education, and nursing students). The Department of Physiology has opportunities for research for this person and also interactions with the Human Nutrition Laboratory. Review of applications will begin 15 May 1991 and continue until the position is filled. Interested applicants should send the curriculum vitae, a summary of teaching goals, and at least three letters of reference to: Dr. T. K. Akers, c/o Department of Physiology, School of Medicine, University of North Dakota, Grand Forks, ND 58202.

HISTOLOGY LECTURERS

Widely approved, successful, international medical school seeks qualified teaching staff. Both senior and junior posts are available. Recently retired lecturers will be considered. Ability to cross-teach in other areas is a plus. Send curriculum vitae (preferably by FAX) to:

Faculty Recruitment Office St. George's University School of Medicine Grenada, West Indies FAX: 809-444-4823

POSITIONS OPEN

FACULTY POSITION: ASSOCIATE, IN-STRUCTOR, ASSISTANT PROFESSOR, ASSO-CIATE PROFESSOR. M.D. or Ph.D. geneticist. Postdoctoral fellowship training desirable. Must have interest and experience in neuroscience related to mental disorders. Contact: Robert G. Robinson, M.D., University of Iowa College of Medicine, Iowa City, IA 52242. University of Iowa is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

BIOLOGY: TWO FACULTY POSITIONS. Applications are invited for two general biologists to teach in the freshman program beginning in August 1991 (Ph.D. preferred, but M.S. accepted). In addition to teaching duties, candidates are expected to advise majors. Xavier University is a predominantly African-American, Catholic, liberal arts institution, and is an Equal Opportunity Employer. Application deadline: 24 May 1991 (or until filled). Send résumé, official graduate transcripts, and three letters of recommendation to: Willie J. Caffey, Jr., Chairman, Search Committee, Biology Department, Box 85-B, New Orleans, LA 70125.

ACADEMIC PATHOLOGY POSITIONS

The Division of Anatomic Pathology at the University of Pittsburgh Medical Center is expanding and seeking academically oriented, Board-certified pathologists with interests in cytology, bone-soft tissue pathology, and hematopathology. Candidates will be expected to participate in teaching medical students, residents, and fellows and to develop scholarly activities in their area of expertise. Such scholarly activities should include research programs in the above areas. Preference will be given to development of research projects in the areas of growth factors, oncogenes, and mechanism of cell growth and differentiation. Academic rank and salary are commensurate with experience and background. Interested individuals should send curriculum vitae along with the names and addresses of three references to: Dr. George Michalopoulos, Chairman, Department of Pathology, University of Pittsburgh School of Medicine, 722 Scaife Hall, Pittsburgh, PA 15261. The University of Pittsburgh Medical Center is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION IN PHARMACOLOGY

The Department of Pharmacology at the University of Alabama at Birmingham (UAB) invites applications for a tenure-track position at the ASSOCIATE PROFES-SOR level available in the summer of 1991. Individuals with a background in both pharmacology and molecular biology are especially encouraged to apply. Candidates must demonstrate a strong research record with current funding and are expected to establish an independent research program. Responsibilities will include teaching of medical/dental and graduate students. Send letter of application with curriculum vitae and three names of references to: Dr. Robert B. Diasio, M.D., Professor and Chairman, University of Alabama at Birmingham, Department of Pharmacology, Box 402 Volker Hall, UAB Station, Birmingham, AL 35294. UAB is an Affirmative Action/Equal Opportunity Employer.

MOLECULAR BIOLOGIST. The Bard College Biology Department seeks a broadly trained biologist with research experience, preferably through the postdoctoral level, in molecular biology. Candidates with experience in genetic approaches to cell biology, immunology, or developmental biology will be preferred. Candidates must have a commitment to quality undergraduate science education for both majors and nonmajors, at an institution that affords many opportunities for interaction with nonscience students and faculty, but also where approximately half of the undergraduate biology majors go on to graduate programs. The successful candidate will be expected to teach molecular biology, cell biology, immunology, developmental biology, and eukaryotic genetics on a regular basis, and to conduct research in one of these areas. The candidate should be prepared to involve students in senior project research, and to develop courses for nonscientists which offer laboratory experience. Salary and rank will be commensurate with experience. Please send curriculum vitae, transcripts, and two letters of recommendation to: John C. Secco, Director, Human Resources, Bard College, P.O. Box 5000, Annandale-on-Hudson, NY 12504. Applications will be evaluated as received. Bard College is an Equal Opportunity/Affirmative Action Employer and encourages applications from minorities and women.

POSITIONS OPEN

ACADEMIC NEUROSCIENTIST UNIVERSITY OF NORTH CAROLINA (UNC) CHAPEL HILL

The Division of Neurosurgery, University of North Carolina-Chapel Hill, is seeking two full-time Ph.D. faculty members. Faculty rank dependent upon the individual's qualifications. Special expertise in CNS injury is required.

Interested applicants should forward their inquiries and curriculum vitae to: Steven K. Gudeman, M.D., Division of Neurosurgery, CB #7060, 148 Burnett Womack Building, UNC School of Medicine, Chapel Hill, NC 27599–7060. Telephone: 919-966-1374. FAX: 919-966-6627.

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

NEUROSCIENTISTS. With research interests in excitotoxins as pertaining to neurological disorders are invited to apply for positions at the postdoctoral/medical fellow level and as INDEPENDENT RESEARCH INVESTIGATORS. Pacific Presbyterian Medical Center (PPMC), an extensive medical complex located in the heart of San Francisco, is a major tertiary referral center for ALS and is currently developing a stroke program. Applicants should send curriculum vitae, selected reprints, names and address of three references, and a letter of research interests to: The Internal Committee, PPMC, 2351 Clay Street, Room 416, San Francisco, CA 94115. PPMC is an Equal Opportunity Employer.

FACULTY POSITION

The Department of Biochemistry and Molecular Biology at the University of Texas M. D. Anderson Cancer Center invites applications for a tenure-track position at the ASSISTANT PROFESSOR level. Applicants should have a Ph.D. or M.D. and a proven record of accomplishments as a postdoctoral fellow or faculty member and have research interests in the area of regulatory processes associated with the differentiation of eukaryotic cells. Applicants should send a letter outlining their research interests, their curriculum vitae, and three letters of reference to: Search Committee, Department of Biochemistry and Molecular Biology (Box 117), The University of Texas M. D. Anderson Cancer Center, 1515 Holcombe Boulevard, Houston, TX 77030. The University of Texas M. D. Anderson Cancer Center is a smoke-free institution. An Affirmative Action/ Equal Opportunity Employer.

RESEARCH PROFESSOR. Biophysicist with expertise in cellular electrofusion and electroporation. Ph.D. degree in biophysics, physiology, biology, or related field, and at least 5 years of experience in transmission and scanning electron microscopy and fluorescence required. Must be able to cover her/his own salary from already awarded grant funds. An Affirmative Action/ Equal Opportunity Employer, M/F/H/V. Send curriculum vitae and three letters of reference to: Dr. H. Gonzalez-Serratos, Chairman of Search Committee, Department of Biophysics, University of Maryland School of Medicine, 660 West Redwood Street, Room 455 HH, Baltimore, MD 21201. For best consideration, applications and nominations should be received by 24 May 1991.

POSTDOCTORAL POSITION

Position available to conduct human nutrition research using stable isotopes. Studies will be carried out in the field and in the Clinical Research Center on site. Research areas include energy metabolism and fatty acid, carbohydrate and lipid metabolism with emphasis on obesity research. Research facilities, scientific environment and funding for these studies are excellent. Minmum requirement is doctoral degree (Ph.D., D.V.M., M.D., D.Sc.) in biomedical science. Salary dependent on qualifications and experience. Anticipated hire date: 1 July 1991. Application deadline: 31 May 1991. Please send curriculum vitae, statement of research interests, and three letters of recommendation to:

Dr. George A. Bray, Executive Director

or Dr. James P. Delany Director of Stable Isotope Laboratory Stable Isotope Laboratory Pennington Biomedical Research Center

6400 Perčins Road, Baton Rouge, LA 70808 Louisiana State University is an Equal Opportunity Employer.

Postdoctoral Fellowship Program

We are pleased to announce the Postdoctoral Fellowship Program for the newly formed Du Pont Merck Pharmaceutical Company. Du Pont Merck is a partnership between its parent companies, E.I. du Pont de Nemours and Merck & Co., Inc. Postdoctoral research will play a key role in our success.

The strong background in research, drug discovery and drug development of the parent organizations are the building blocks for Du Pont Merck. We look forward to creating a research-based, independent pharmaceutical firm which will occupy a leading position in today's global pharmaceutical industry. To accomplish this, selected Postdoctoral candidates will conduct research in the areas of our scientific interest, publish in scientific journals, attend and present their work at scientific meetings.

Du Pont Merck is seeking motivated individuals for two-year research programs in the following areas:

- Chemical Sciences
- Biotechnology
- Pharmacology
- Viral Diseases
- Cancer and Inflammatory Diseases
- Cardiovascular & Central Nervous System Diseases
- Drug Metabolism
- Toxicology & Safety Assessment
- Radiopharmaceuticals
- Rational Drug Design
- Biophysics
- Chemical Process Development

The Fellowship Program offers a comprehensive package including a novel and exciting training environment, competitive salaries and medical benefits. For prompt, confidential consideration, forward a CV and statement of research interests and career

goals to:



Dr. Lynn W. Enquist, Program Coordinator, The Du Pont Merck Pharmaceutical Company, Dept.SCI-17, P.O. Box 80328, Wilmington, DE 19880-0328. An equal opportunity employer M/F/H/V.

THE DU PONT MERCK PHARMACEUTICAL COMPANY Merging Strengths...Emerging Opportunities

Post-Doctoral Position

National Institute of Diabetes and Digestive and Kidney Diseases Phoenix, Arizona

A post-doctoral fellowship is available immediately for a recent Ph.D. or equivalent experience in biochemistry or related discipline to participate in studies of the mechanism by which insulin regulates Protein Tyrosine Phosphatase activity. Results of studies conducted in our laboratory suggest that abnormal regulation of skeletal muscle PTPase activity by insulin may be the primary defect responsible for insulin resistance and subsequent development of non-insulin dependent diabetes mellitus in humans. Available projects include: expression of new PTPase cDNAs from human muscle, purification and characterization of the expressed proteins, and mechanisms of regulation of these PTPases by covalent modification.

This position is funded through the NIH Intramural Research Training Award Program and has a starting annual stipend of \$25,000 - \$28,000, depending on length of previous postdoctoral experience.

Send curriculum vitae and letter of application to:

James Sommercorn, Ph.D. Clinical Diabetes and Nutrition Section National Institutes of Health 4212 North 16th Street Room 541 Phoenix, Arizona 85016

NIH is an Equal Opportunity Employer

TECHNICAL SUPPORT SCIENTIST

San Diego

HYBRITECH INCORPORATED, a subsidiary of Fortune 100 Eli Lilly and Company, is an industry leader in the biotechnology/in-vitro diagnostics field. This scientist will lead a small group toward the identification and implementation of product and process improvements related to the manufacture of biological reagents and in-vitro diagnostic tests.

Interaction with R&D and Process Development scientists to introduce new technologies as well as continuous involvement with other areas of manufacturing to solve technical problems are among the multiple project responsibilities. Candidates should have a PhD in Chemistry, Biochemistry, Immunochemistry or Bioanalytical Chemistry, or a BS/MS with equivalent scientific experience. A minimum of one to two years of industrial experience in the development or technical support of biological reagents or diagnostic assays is required. Strong analytical, written and oral communication skills, and understanding of statistical approaches to experimental design, and technical leadership abilities are essential.

HYBRITECH offers a stimulating work environment and competitive salaries and benefits. Interested individuals should send their resume to: HYBRITECH INCORPORATED, DC/SC-5-10-91/TSS, P.O. Box 269006, San Diego, CA 92196-9006. An equal opportunity employer.



Protein Chemists, Enzymologists, Molecular Biologists

United States Biochemical Corporation is a leading manufacturer of enzymes and analytical reagents for DNA Sequencing, Molecular Biology, Ribozyme research, and Diagnostic Pharmaceuticals. Continued growth requires professional personnel able to develop and commercialize products from the cutting-edge of research currently being conducted at academic and medical institutions around the world.

Protein Chemists, Enzymologists and Molecular Biologists are needed to expand USB's program of development and manufacture of new and existing products and services. Entry level and skilled scientists as well as individuals familiar with GLP / GMP manufacturing and lab administration are encouraged to apply.

While on-the-job training and personal development are an integral part of the USB philosophy, applicants must have a BS / MA in biology, biochemistry, or related field and laboratory experience in enzymology, recombinant DNA techniques and DNA sequencing, or the analysis and purification of proteins. Applicants should submit their resume, names and phone numbers of three references, and a description of laboratory skills and career aspirations to:

> Manager Personnel Services RBM-SRB-3 United States Biochemical Corporation P.O. Box 22400 Cleveland, Ohio 44122 EEO Employer M/V/H



PROJECT DIRECTOR FOR GLOBAL CHANGE

Directorate for International Programs

The Directorate for International Programs of the American Association for the Advancement of Science (AAAS) seeks a Project Director to coordinate and significantly expand its activities in the field of global change. AAAS is the nation's leading general science and engineering association and is based in Washington, DC. The Director of AAAS' new Global Change Project (GCP) will have primary staff responsibility for designing and implementing activities focused on important science and science policy issues in the field of global change.

The GCP Director's responsibilities will include organizing and convening scientific meetings, producing appropriate publications, facilitating contacts between U.S. and foreign colleagues in the field, providing expert advice to AAAS officers about appropriate activities in this area, serving as primary AAAS representative in the global change field, and monitoring global change issues and incorporating emerging trends into program activities. He/she will also be required to seek and coordinate external financial support for AAAS global change activities.

Applicant should be familiar with a wide range of global change issues, have a Master's degree or equivalent education and experience in an appropriate field of science/engineering, and have worked for five to ten years in at least one of the following areas: (a) global change research; (b) the management of multidisciplinary international activities; and (c) fund raising from government and private sources. Special training or experience in the field of global climate change is preferred. Excellent communication and management skills are required.

Please send a letter expressing interest together with current resumé and salary requirement to Ms Debra Wright, Suite 854, Office of Human Resources, AAAS, 1333 H Street, NW, Washington, DC 20005. EOE

VETERINARY PATHOLOGISTS

INTERNATIONAL RESEARCH AND DEVELOPMENT CORPORATION, a highly diversified and growing contract research laboratory, has immediate openings for a Veterinary Pathologist with primary Clinical Pathology responsibilities and a Veterinary Pathologist with primary Anatomic Pathology responsibilities at its Mattawan, Michigan location.

International Research and Development Corporation's Pathology Division is responsible for clinical and anatomic pathology for its extensive program of pathotoxicologic research for the pharmaceutical, agricultural, chemical and consumer industries, as well as governmental agencies.

If you would like to play a key role in our continuing success and have a DVM with board (ACVP) certification and experience in toxicologic pathology (Post-Doctoral studies [PhD, MS] in pathology would be helpful), please forward your curriculum vitae in strictest confidence to:

> Dr. C. Spencer Streett, VMD Directory of Pathology International Research & Development Corporation 500 North Main Street Mattawan, Michigan 49071 Phone: (616) 668-3336

IRDC IS AN EQUAL OPPORTUNITY EMPLOYER

Cephalon, a leading neuroscience company engaged in discovering and developing drugs for treating neurodegenerative diseases, has opened several new positions for qualified scientists:

SENIOR SCIENTIST

To direct the development of animal models of neurodegenerative diseases.

NEUROBIOLOGISTS

With M.S./B.S. and Ph.D. experience with in vivo and/or in vitro pharmacology.

PH.D. MEDICINAL CHEMISTS

With organic and/or peptide experience.



Equal Opportunity Employer

IMMUNEX®

SCIENTISTS

Immunex Corporation is a Seattle pharmaceutical company focused on the research, development, manufacturing, and marketing of products to treat immune system disorders. We are currently recruiting Scientists to join our Purification Development and Biochemistry groups.

Purification Development

The successful candidate will develop and scale-up protein purification processes for recombinant proteins; including transfer of process from research to manufacturing, and the supervision of initial manufacturing process runs. This individual will also coordinate the establishment of GMP documentation for new processes and assist in the characterization of purified proteins, including the development of analytical techniques and their transfer to Quality Control.

Scientists with a Ph.D in Biochemistry, Chemical Engineering or related discipline with relevant post doctoral/industry experience are encouraged to apply. Previous experience with protein purification/ analysis, scale-up and GMP procedures is preferred.

Cytokine Receptor Biochemistry

The successful candidate will characterize the structure and function of novel cytokine receptor systems. Experience in radioreceptor assays, protein chemistry and monoclonal antibody characterization is essential. Additional experience/interest in second messengers systems is preferred.

Scientists with a Ph.D in Biochemistry, Molecular pharmacology or related discipline with relevant post doctoral/industry experience are encouraged to apply.

Both positions require good communication skills and the ability to work effectively in a collaborative environment are essential.

Immunex Corporation offers a fast paced, stimulating environment, competitive salaries and an excellent benefits package. For consideration, please submit C.V., names of three references, and a list of publications to:

IMMUNEX CORPORATION Attn: Human Resources Dept. 51 University Street Seattle, WA 98101 Fax: (206) 587-0606

Equal Opportunity Employer

I mmunoGen, Inc. is a rapidly growing biotechnology company dedicated to the development of immunotoxins and other cancer therapeutics. We are seeking outstanding scientists to join us in exploring new approaches to human disease. Candidates should enjoy taking the initiative in solving scientific problems to achieve near-term and long-term goals.

... widening the therapeutic window.

Staff Scientists in Cell Biology

Candidates should hold a Ph.D. in Cell Biology, Immunology or related disciplines and have a strong research background in mammalian cell biology or in-vitro immunology. Recent graduates are welcome to apply.

Staff Scientists in Biochemistry

Candidates should have a Ph.D. in Biochemistry or related disciplines, with a strong research background in biochemistry. Experience in chemical modification of proteins and in protein purification would be an asset. People with a proven record of realizing ideas through developing independent research projects would be strong candidates.

ImmunoGen offers an excellent salary and benefits package including 100% paid Health and Dental Insurance and Tuition Assistance. The company is located in a new, fully-equipped, state-of-the-art laboratory in Cambridge, midway between the campuses of HARVARD and MIT.

Please send a detailed resume including three references and a statement describing your scientific interests and career goals. All responses will be acknowledged. Reply to:

> Jeanne A. Horgan Personnel Department ImmunoGen, Inc. 148 Sidney Street Cambridge, MA 02139

IMMUNOGEN, INC.

An Equal Opportunity Employer.



CHAIR DEPARTMENT OF PHYSIOLOGY

The Texas Tech University Health Sciences Center School of Medicine invites applications for the position of Chair of the Department of Physiology. Applicants should have a distinguished record in research, a commitment to training graduate students, medical students and postdoctoral fellows, and a desire to exercise strong and innovative leadership in building the Department to a level of national prominence. Preference will be given to candidates who have a record of consistent research productivity and support through extramural sources, and have served on grant review boards at the national level. Interested applicants should send their curriculum vitae, the names and addresses of three references, and a brief statement indicating their interest in the position to

Sandra Sabatini, PhD, MD Chair, Physiology Search Committee Texas Tech University Health Sciences Center

Department of Internal Medicine, Division of Nephrology Lubbock, Texas 79430

The search committee will begin initial folder review in June and will continue the search process until a chair is selected. Texas Tech University Health Sciences Center School of Medicine is an Affirmative Action Institution.

PROTEIN X-RAY CRYSTALLOGRAPHER

National Institute of Allergy and Infectious Diseases

National Institutes of Health

A protein crystallography laboratory is being established with intramural AIDS funding to conduct an original research program and to interact with other scientists within the NIH intramural program. Applicants for director of the crystallography lab are being sought. Ph.D. or M.D. applicants should have a record of achievement in solving protein by structures X-ray crystallography. Salary and research resources will be commensurate with credentials and research experience.

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

John E. Coligan, Ph.D. Chairman, Search Committee BRB, NIAID, NIH Building 4, Room 413 9000 Rockville Pike Bethesda, MD 20892 Telephone: 301-496-8247 Facsimile: 301-402-0284

NIH is an Equal Opportunity Employer

Staff Director International Security and Arms Control

The National Academy of Sciences is seeking a director for its Committee on International Security and Arms Control. Will plan and execute meetings, including those with counterpart foreign groups keep abreast of arms control developments and synthesize source materials for the committee; seek and develop new committee projects, including policy studies; coordinate selection of committee members, prepare reports of meetings and other committee activities; act as a liaison inside and outside the institution; oversee administrative and financial affairs and ensure compliance with institutional policies. Requires Ph.D. or equivalent in a political science, physical science, or a related field and at least 6 years related experience. Research and policy analysis experience related to international security and arms control, knowledge of the relevant U.S. and international the relevant U.S. and international scientific/technical community, demon-strated effective management and supervisory skills, effective oral and written communication skills (including manuscript editing) also required. Demonstrated knowledge of federal agencies related to national security and arms control, and their procurement practices, highly desirable. language skills also desirable. Russian Please send resume in con-

fidence to: NRC/OIA, HA 450 (MW), 2101 Constitution Avenue, N.W. Washington, D.C. 20418. EOE.



RESEARCH ASSISTANT

Hematopoietic Growth Lab

An internationally recognized research facility is seeking a quality professional to participate in the studies of hematopoietic differentiation and regulation of growth of isolated stem cells and human and murine bone marrow cells. Strong knowledge of cell culture and molecular techniques required.

An MS degree or equivalent, combined with a minimum 5 years experience and background in molecular techniques such as preparation of mRNA, restriction endonuclease mapping, Southern analysis, labeling of probes for genetic analysis, and polymerase chain reaction are required.

Excellent benefits include 100% tuition refund and 26 personal days. Manhattan East 60s location. Qualified applicants should submit resume, which MUST include salary history/ requirements, to: **The New York Blood Center, Anna Rita Migliaccio, Ph.D., Associate Investigator, 310 East 67th St, NY, NY 10021.** Equal opportunity employer M/F/H/V.

Lindsley F. Kimball Research Institute A Division of the New York Blood Center Where concern for the community comes first

Postdoctoral Fellow Gastrointestinal Pathology

The PARKE-DAVIS Pharmaceutical Research Division of Warner-Lambert Company is seeking a Postdoctoral Fellow to join the Pathology and Experimental Toxicology Department.

The fellow will work in the Pathology & Experimental Toxicology Department to characterize the normal colonic histology and the pathogenesis of colitis in marmosets. These studies will necessitate the use of transmission electron microscopy and morphometry to define sub-cellular and quantitative changes in the colon. Immunofluorescence/immunocytochemistry will be used to identify specific cell types that comprise the inflammatory infiltrate present in various disease phases. Cell kinetics studies will be undertaken utilizing special techniques to determine proliferative rates of crypt epithelia. These studies will help to validate marmoset colitis as a model for ulcerative colitis in man. The model would then have application in assessing potential efficacy of drugs for treatment of IBD.

Applicants should have a DVM, DVM/Ph.D. or Ph.D. in experimental pathology or immunology, with experience in electron microscopy and immunocytochemistry. Appointment is for one year, renewable for a second year, and includes an attractive compensation and benefits package as well as relocation assistance. Send CV and references in confidence to **PARKE-DAVIS**, **Human Resources, Box JDM-0044, 2800 Plymouth Road, Ann Arbor, MI 48105.** "Smoke-Free Work Environment"

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Molecular Biology of Cellular Signaling POSTDOCTORAL POSITIONS

Several postdoctoral positions are now available among an active group of investigators interested in basic molecular mechanisms of cellular signaling. Approaches to these questions involve biochemistry, molecular biology, electrophysiology, and genetics. All focus on the use of recombinant proteins, both purified and expressed in appropriate cellular backgrounds, to study how signals are recognized and conveyed to cytoplasmic sites to influence the growth, differentiation, and specialized functions of mammalian cells and lower eukaryotes. Collaborative interactions among laboratories are strong and are supported by core facilities for cell culture and expression of recombinant proteins, oligonucleotide and peptide synthesis, and protein sequencing and structure determination. Individual positions are available for 2–3 years and are supported by NIH and other sources. Interested applicants should correspond with the investigators listed below at the Department of Pharmacology, University of Texas Southwestern Medical Center, 5323 Harry Hines Blvd., Dallas, Texas 75235-9041.

Francesco Belardetti, MD., Ph.D. — regulatory mechanisms of synaptic efficacy in the nervous system: roles of arachidonic acid metabolites and GTPbinding proteins

Melanie H. Cobb, Ph.D. — mechanisms of action of insulin, NGF, and other growth factors: properties of receptor kinases, regulation of protein kinase cascades, and roles of protein kinases in differentiation and transformation

David Garbers, Ph.D. — signaling mechanisms between the sperm cell and the egg; cellular functions of guanylyl cyclase-coupled receptors

Alfred G. Gilman, M.D., Ph.D. — the roles of GTP-binding regulatory proteins (G proteins) as switches and timers; information control across the plasma membrane; adenylyl cyclase

Joel M. Goodman, Ph.D. — assembly of organelles and protein topogenesis: organellar targetting signals and corresponding receptors, the biogenesis of peroxisomes and functions of the peroxisomal membrane

Marc C. Mumby, Ph.D. — intracellular signaling pathways controlling cell growth and transformation; transformation by DNA tumor viruses, interaction of viral oncogenes with cellular proteins

Elliott M. Ross, Ph.D. — G protein-coupled receptors: structure, signal sorting among G proteins, regulation, subcellular routing

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FERMENTATION—You'll develop small scale procedures for high expression of bioreagents and develop an independent research program in this general area. Requirements include a PhD in Microbiology or a related discipline, a working knowledge of bench scale fermentation equipment and experience with recombinant organisms.

TRANSGENIC TECHNOLOGY—You'll develop animal models of human diseases. Candidates must have DVM, MD, PhD or the equivalent. Position requires experience in transgenic methodology (embryo microinjections/ES cell approach), animal surgery, recombinant DNA procedures and methods of gene detection at DNA, RNA and protein levels.

CARDIOVASCULAR MOLECULAR BIOLOGY—Applicants should possess PhD or MD degree and have the equivalent of 1-2 years of post-doctoral experience. In addition, they should have experience using standard molecular biology techniques. Experience in at least one of the following areas would be a plus: Cell culture technology, particularly primary cardiac cell culture, eukaryotic cloning and expression systems, gene regulation, growth factors and signaling pathways, cell biology of the cardiovascular system.

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All positions require a BS/MS in Biology or Chemistry and at least one year of experience in a lab environment. Openings are in fermentation, molecular biology, biochemistry, pharmacology and DNA/RNA chemistry.

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(Biotechnology), E400/2425, The Du Pont Merck Pharmaceutical Company, Wilmington, DE 19880-0400. An Equal Opportunity Employer M/F/H/V. U.S. Citizenship or permanent visa required and you must meet other appropriate IRCA requirements.

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POSITIONS OPEN

MOLECULAR BIOLOGIST

The University of Cincinnati Department of Molecular Genetics, Biochemistry, and Microbiology and the Department of Internal Medicine is interested in an individual possessing a Ph.D. in molecular biology with extensive experience in gene regulation of the cardiac extracellular matrix proteins. The candidate must have a strong track record or renewed extramural competitive funding and have prior experience with gene expression, including Northern and Southern blot analysis, in situ hybridization, and nuclear run-on assays. The individual will be expected to continue his/her own independent research program and to interface with ongoing and new multidisciplinary investigations within and between the departments. The University of Cincinnati is a comprehensive university in the state system. Curriculum vitae should be sent to:

Search Committee Department of Molecular Genetics, Biochemistry, and Microbiology University of Cincinnati College of Medicine Cincinnati, OH 45267–0524 Affirmative Action/Equal Opportunity Employer.

ELECTRON MICROSCOPY: RESEARCH SPECIALIST. Full-time position available immediately for an individual with a sound knowledge of transmission and scanning microscopy. Also required: experience in handling of biological samples, preparative procedures (conventional and cryomethodologies, fixation and embedding, ultra-thin sectioning, immunolabeling), and photographic techniques. Must be able to teach EM techniques to graduate students and be willing to collaborate with a variety of laboratories and investigators. Women and minorities are particularly invited to apply. Please contact: Dr. John Godleski, Respiratory Biology Program, Harvard School of Public Health, Building I, Room 1309, 665 Huntington Avenue, Boston, MA 02115.

POSTDOCTORAL POSITION. Available from 1 August 1991 to study the regulation of transcription initiation by RNA polymerase III during *Xenopus* development. The study involves a structure function analysis of transcription factors and their interactions with each other. Previous experience in molecular biology is preferred. Please submit curriculum vitae and names of three references to: Mr. Dale Stephenson, Jefferson Medical College, 1025 Walnut Street, Room 100I, Philadelphia, PA 19107. We are committed to a smoke-free environment. Equal Opportunity Employer.

TWO POSTDOCTORAL POSITIONS. NIHfunded study on neotropical malaria vectors. One population geneticist to run isoenzyme electrophoresis in Gainesville. One morphologist/population ecologist to study reproductive isolation in Vero Beach. Both require field experience and Spanish. Salary from \$26,000 to \$33,000 for up to 3 years. Send résumé and names of four references by 17 June 1991 to: L. P. Lounibos, Florida Medical Entomology Laboratory, 200 Ninth Street SE, Vero Beach FL 32962. E-mail: LPL @ IFASGNV.BITNET. The University of Florida is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION MOLECULAR ENDOCRINOLOGY

Available 1 July 1991 to study the mechanisms of signal transduction by the insulin and IGFI receptors. A strong background in molecular biology and/or receptor biochemistry is preferred. Salary commensurate with experience. Send curriculum vitae with references to: Dr. Thomas Gustafson, School of Medicine, Department of Physiology, University of Maryland at Baltimore (UMAB), 655 West Baltimore Steet, Baltimore, MD 21201. UMAB is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION. Available for electron microscopist-image processor to work on a research project studying the crossbridge structure of insect flight muscle in defined static states. The project involves 3-D imaging by tomography and oblique section methodologies. Salary range \$22,000 to \$28,000 depending upon experience. Send application and three references to: Dr. Kenneth Taylor, Department of Cell Biology, Box 3011, Duke University Medical Center, Durham, NC 27710. Duke University is an Equal Opportunity/Affirmative Action Employer.

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POSTDOCTORAL POSITION IN MOLECULAR NEUROBIOLOGY

Postdoctoral positions in molecular neurobiology are immediately available, emphasizing studies on voltagegated, neurotransmitter and second messenger-activated ion channels associated with chemical and electrical signaling in the nervous systems. Experience in biochemistry, molecular biology, transgenic technology, and membrane biophysics is recommended. The program offers exceptional opportunities for interdisciplinary training in seven well-established laboratories. Yale is an Equal Opportunity Employer. Please contact: Catherine Fobes, Staff Assistant, Department of Cellular and Molecular Physiology, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06510.

FOUR POSTDOCTORAL POSITIONS

Gladstone Foundation Laboratories, University of California, San Francisco. (1) NEUROBIOLOGY: To study the role of apolipoproteins, lipoproteins, and lipoprotein receptors in nerve regeneration, and in normal nervous system physiology. (2) PROTEIN BIO-CHEMISTRY: Study of structure-function relationship of apolipoprotein E; correlation of 3-D structure with lipid and receptor binding properties. (3) MOLECU-LAR BIOLOGY: Study of apolipoprotein B control and expression, mutations, and expression in animals. (4) CELL BIOLOGY/PLATELET BIOCHEMISTRY: Study regulation of platelet function by actin-membrane interactions. Positions in the laboratories of Drs. Robert Pitas, Karl Weisgraber, Beatriz Levy-Wilson, and Joan Fox. Competitive salary and benefits. Send curriculum vitae and names of three references to: E. Belanger 4-22-sci, Gladstone Foundation Laboratories, University of California, San Francisco, P.O. Box 40608, San Francisco, CA 94140–0608. Equal Opportunity Employer.

> PETROLEUM GEOLOGY THREE POSTDOCTORAL POSTS PALYNOLOGY SEQUENCE STRATIGRAPHY ISOTOPE DIAGENESIS

Elf UK is supporting a major research initiative to develop an integrated sequence stratigraphic, diagenetic, and poroperm model for exploration in the Upper Jurassic of the North Sea Central Graben. Posts are for a minimum of 2 years, and will involve close working collaboration with Elf UK and Elf Aquitaine Pau, SW France. Salary ranges: £11,400 to £18,100. Publication of results is expected. Send letters of application by 31 May 1991 with full curriculum vitae and names of three referees to:

PALYNOLOGY: Dr. Bruce Tocher, Institute of Earth Studies, University College Wales, Aberystwyth SY23 3DB, U.K. Telephone: 44-970-622611. SEQUENCE STRATIGRAPHY: Dr. Steve Flint,

SEQUENCE STRATIGRAPHY: Dr. Steve Flint, Department of Earth Sciences, University of Liverpool, Liverpool L69 3BX, U.K. Telephone: 44-51-794-5192. FAX: 44-51-794-5170.

ISOTOPIC DIAGENESIS: Dr. Stuart Haszeldine, Department of Geology, University of Glasgow, Glasgow G12 8QQ, U.K. Telephone: 44-41-339-8855. FAX: 44-41-339-4817.

POSTDOCTORAL POSITIONS IN NEUROBI-OLOGY. Studies of nicotinic acetylcholine receptors of muscles and nerves and the autoimmune response to nicotinic receptors of muscle require candidates with M.D. or Ph.D. degrees experienced with either molecular genetics (for cDNA cloning, mutagenesis, and expression), or experienced with protein biochemistry and monoclonal antibodies (for receptor purification and characterization, and monoclonal antibody production, and studies of subunit synthesis and assembly), experienced with electrophysiology (for studies of receptors expressed from cDNAs in *Xenopus* oocytes and transformed cells), or experienced with histology (for immunohistological localization of subunit mRNAs). For the right candidates, there is opportunity to work in several of these areas in a highly productive laboratory. Send your curriculum vitae and names, addresses, and telphone numbers of three references to: Dr. Jon Lindstrom, Institute of Neurological Sciences, University of Pennsylvania School of Medicine, 215 Medical Education Building, Philadelphia, PA 19104–6074. FAX: 215-573-2015. Join Wyeth-Ayerst Research, one of the world's largest pharmaceutical research and development groups. Now is your opportunity to become an integral part of our fast-paced, innovative research team, working at our Princeton, NJ and Radnor, PA locations.



Wyeth-Ayerst Research has recently expanded its Postdoctoral Program and has the following three positions available for Ph.D.s:

Neuroreceptor Subtypes

An immediate opening is available to study the molecular biology, pharmacology and therapeutic utility of novel neuroreceptor subtypes. This position is an integral part of a multidisciplinary research team whose goal is to clone and characterize molecular subtypes of human neuroreceptors. Applicants should have a Ph.D. in molecular biology, biochemistry or neuroscience. Experience in DNA cloning, sequencing or PCR, and CNS physiology/pharmacology is desirable. Molecular biology work will be in Radnor, PA with neuropharmacological follow-up in Princeton, NJ. **Position A.**

Molecular Biology of Adhesion Molecules

Join an exciting team research effort to study the role of leukocyte and endothelial cell adhesion molecules in disease processes. The postdoctoral fellow will interact with a multidisciplinary group of molecular biologists and immunopharmacologists at our two research facilities. Research efforts of this position will include the cloning, expression and manipulation of genes for adhesion molecules and studies in the cellular regulation of adhesion molecule expression.

Applicants should be Ph.D.s with a degree in biochemistry, molecular biology, immunology, cell biology or a related field with experience in the areas of molecular biology or protein purification. Additional experience with adhesion molecules, cDNA cloning, or protein sequencing and expression is desirable. **Position B.**

Atherosclerosis Research

This position will focus on the basic molecular biology of lipoprotein and apoprotein regulation. The ideal candidate will possess a Ph.D. in molecular biology, biochemistry or equivalent. Cell culture experience and a strong background in atherosclerosis research including experience in lipoprotein metabolism and methodology, along with familiarity with transcriptional regulatory elements, are desirable. **Position C.**

These Postdoctoral Fellows will conduct independent research, publish in scientific journals, attend and present work at scientific conferences and maintain close ties with the academic community.

Wyeth-Ayerst Research is an equal opportunity employer. We offer an excellent compensation and benefits package, along with the opportunity for career advancement. Forward curriculum vitae, indicating position letter, to: **Wyeth-Ayerst Research, Personnel Manager, CN 8000, Princeton, NJ 08543-8000.** M/F/H/V.



10 MAY 1991

Neuropsychologist

The Laboratory of Neuropsychology, National Institute of Mental (NIMH) Health Intramural Research Program, will have a Postdoctoral Fellowship available from September 1991. Located in Bethesda, MD, the laboratory conducts neurobehavioral research with special emphasis on the neural substrates underlying learning, memory, and other cognitive processes. Applicants must have a Ph.D. or equivalent within the last 3 years. Stipends vary from \$25,000 to \$30,000, depending on postdoctoral experience, and the position is renewable, subject to administrative approval, for up to three years. To apply, send C.V. and letter of research interests to:

Dr. Elisabeth A. Murray Laboratory of Neuropsychology National Institute of Mental Health Building 9, Room 1N107 Bethesda, MD 20892

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Take advantage of this exciting opportunity to advance your career with **ENSYS**, a young and dynamic company that develops, manufactures, and markets onsite diagnostic test kits to detect the presence of hazardous materials in soil and water. **ENSYS** also makes air-monitoring "dosimeter" badges worn by industrial workers. Ours is a rapidly growing field. Come grow with us!

Several positions are available in the product development group to develop new immunoassay test kits for the detection of environmental pollutants. The minimum requirement is a BS/BA in a scientific field. Enhancements to your resume could include experience in developing and commercializing immunoassays, antibody screening, conjugate evaluation, and a strong analytical background.

ENSYS is located in proximity to the Research Triangle Park. Salaries and benefits are competitive and we offer equity participation. For confidential consideration send your resume to: **Dr. Jim Mapes**, **ENSYS**, **INC.**, **PO.** Box 14063, **Research Triangle Park**, **NC 27709**.



POSITIONS OPEN

POSTDOCTORAL POSITION. The research is on modeling the transport of organic chemical contaminants in laboratory model systems and interpreting transport data from a large-scale natural gradient field transport study that is under way in the Subsurface Chemical Processes Research Group at Tyndall Air Force Base, Panama City, Florida. A physical sciences background with emphasis in hydrogeology, geology, or hydrology is preferred. Degree within last 3 years and U.S. *citizenship* or PRA status required. For application contact: Postgraduate Research Program/Tyndall, Science/Engineering Education Division, Oak Ridge, TN 37831– 0117. Telephone: 615-576-3190.

POSTDOCTORAL POSITION

Position available for a biochemist/molecular biologist to participate in studies of plasminogen activator inhibitor-1, a protein which plays a critical role in the regulation of blood coagulation and a number of other important biologic processes. Projects include structure/ function analysis of recombinant proteins and the use of transgenic and ES-cell technologies to develop specific animal models. Please send a description of research interests, curriculum vitae, and names and telephone numbers of three references to: Dr. David Ginsberg, University of Michigan, 1150 West Medical Center Drive, 4520 MSRB I, Ann Arbor, MI 48109–0650. Equal Opportunity Employer.

POSTDOCTORAL POSITION. Available immediately to study the biochemistry and cell biology of malaria parasites. The project will include the heterologous expression of malarial proteinases, the optimization of protein purification strategies, the elucidation of structure/function relationships, and the evaluation of candidate proteinase inhibitors. Experience in molecular biology and protein biochemistry are required. To apply, please send curriculum vitae and three letters of reference to: Dr. Philip Rosenthal, University of California San Francisco (UCSF), Parasitology Laboratory, Box 0811, 3rd and Parnassus Avenues, San Francisco, CA 94143-0811. UCSF is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

POSTDOCTORAL POSITION MOLECULAR IMMUNOLOGY

A position is available immediately to participate in a study of site-directed mutagenesis of anti-carbohydrate antibodies, with a particular interest in the role of variable region glycosylation in antigen binding. Experience in molecular biology required. Send curriculum vitae and names of three references to: Dr. Donald Marcus, Departments of Medicine, Microbiology, and Immunology, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030. Baylor College of Medicine is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIPS. Two positions are available to join an 11-member group studying protein:protein interactions in signal transduction, tumor cell invasion, and human immunodeficiency virus infection. 3D structures of active peptide interfaces are determined using 2D and 3D nuclear magnetic resonance (NMR). The facility is well equipped: excellent tissue culture/molecular genetics laboratories, peptide synthesizer, Bruker AM500 NMR, silicon graphicsbased data processing and molecular modeling. One position is for an individual to carry out NMR experiments on peptide: receptor systems; requires a Ph.D. in chemistry or closely related field, and demonstrated productivity with NMR of biological samples. The second position is for an individual to apply molecular genetics techniques to enhance receptor protein yields; requires a Ph.D. in molecular biology or closely related field and demonstrated experience with mammalian/baculovirus expression systems. The ability to collaborate well is essential. Screening of candidates begins 15 May 1991 and continues until suitable candidates are hired. Send letter of application, curriculum vitae, and three letters of reference to: Dr. J. R. Starkey (molecular genetics position), Microbiology Department, Lewis Hall, or Dr. E. A. Dratz (NMR position), Chemistry Department, Gaines Hall, Montana State University, Bozeman, MT 59717.

> Veterans Preference, Affirmative Action/ Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION

Available 1 July 1991 to 30 June 1994 for recent Ph.D. with background in biochemistry or molecular biology to conduct research on regulation of antioxidant enzymes in lung injury models. Familiarity with cell culture and molecular techniques and ability to work independently are essential. Salary at NIH scale or higher. Forward curriculum vitae and three references to: Dr. **Robert M. Jackson**, 323 LHR, University of Alabama at Birmingham, Birmingham, AL 35294.

POSTDOCTORAL POSITION IN BIOCHEMICAL/MOLECULAR PHARMACOLOGY

Areas of research include vitamin K metabolism, thiol group metabolism, and the molecular biology of enzymes of drug metabolism. Applicants may choose one or more of these projects. Please submit a letter describing current and past research experience, your curriculum vitae, and three names of people willing to serve as references to: Dr. James J. Lipsky, Chief of Clinical Pharmacology, Guggenheim 6, Mayo Clinic, Rochester, MN 55905.

POSTDOCTORAL POSITIONS. Two positions are available to study protein structure-function relationships. The first position requires experience in multidimensional NMR techniques (applicants must be American citizens). The second position requires experience using computational techniques to study protein structure (no citizenship restrictions). Send curriculum vitae and names and telephone numbers of three references to: Dr. Judith G. Shelling, Department of Biochemistry, University of Kentucky, Lexington, KY 40536–0084. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWS, NEURO-SCIENCE. Several NIH training grant positions will become available in the Department of Physiology and Neurobiology between June and October 1991. Research opportunities are available in laboratories studying membrane biophysics, cellular and molecular neurobiology, excitation-contraction coupling, auditory physiology, motor control, neuroendocrinology, and biological rhythms. Faculty include: M. Cantino, W. Chapple, J. Covault, R. Gallo, B. Goldman, S. Korn, L. Landmesser, A. Moiseff, and G. Pilar. Send curriculum vitae and letter describing research interests. For a departmental brochure and additional information, contact: L. Landmesser, Department of Physiology and Neurobiology, University of Connecticut, Box U-42, 75 North Eagleville Road, Storrs, CT 06269–3042. Telephone: 203-486-4551. Affirmative Action/Equal Opportunity Employer (Search # 1A261/1A262).

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Our new program in genetic analysis of agriculturally important traits has openings for **POSTDOCTORAL FELLOWS** and **GRADUATE RESEARCH ASSIS-TANTS** to do RFLP/RAPD mapping, QTL mapping, and YAC manipulation in cotton, tomato, sorghum, *Brassica*, and *Arabidopsis*. Send curriculum vitae, GRE scores, and three reference letters to: A. Paterson and R. Wing, Department of Crop and Soil Sciences, Texas A&M University, College Station, TX 77843. Telephone: 1-409-845-3773. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP. Research Institute of Scripps Clinic, La Jolla, California. Position immediately available in area of biosensor development. Qualifications: Ph.D. bio/analytical chemistry with experience in determination of affinity constants for antibody/ antigen interaction, ELISA techniques, protein conjugation, RIA. Electrochemistry experience helpful. Send résumé and three references to: Dr. K. D. Janda, Departments of Molecular Biology/Chemistry (MB20), Research Institute of Scripps Clinic, 10666 North Torrey Pines Road, La Jolla, CA 92037. FAX: 619-554-2871. Affirmative Action/Equal Opportunity Employer, M/F/H.

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RESEARCH OPPORTUNITIES IN BIOTECHNOLOGY

Amgen, an innovative leader in the discovery, development and marketing of human therapeutics through applied biotechnology, has immediate opportunities for Research Scientists and Research Associates:

RESEARCH ASSOCIATES: MOLECULAR AND CELLULAR BIOLOGY Dept. #583

These positions are for our program in Inflammatory Cell Research. The objectives of this program are to isolate and characterize protein factors and corresponding genes involved in migration and activation of phagocytes.

Minimum qualifications include a BS or MS in an appropriate field with two years of laboratory experience in molecular and cellular biology. Experience in basic recombinant DNA methodologies and/or cell culture techniques is highly desirable.

RESEARCH ASSOCIATE: STEM CELL BIOLOGY Dept. #584

Responsibilities will include FACS sorting of mouse and human bone marrow cells, *in vitro* bone marrow assays and *in vivo* repopulating assays. The person selected will participate in ongoing programs leading to the identification and characterization of novel cellular growth factors. Candidates must have a BS or MS and minimum of 1 year's experience in tissue culture. Familiarity with bone marrow colony forming assays and FACS sorting procedures and experience in handling small animals are highly desirable.

RESEARCH SCIENTIST OR ASSOCIATE: BIOPHYSICS Dept. #585

The level of this position (Research Scientist or Associate) will depend on the qualifications (Ph.D., MS or BA) and relevant experience of the person selected. The opening is in the biophysical lab in our Protein Chemistry Group. The responsibility of the biophysical group is to characterize recombinant proteins using hydrodynamic, spectroscopic, and thermodynamic techniques. The selected candidate will work in one of the following areas: analytical ultracentrifugation, spectroscopy, and calorimetry.

Amgen offers a stimulating and challenging research environment with the unique opportunity to contribute to the development of leading edge products in the pharmaceutical industry. If you have the necessary skills and qualifications and would like to be a part of a company that places a high priority on its human resources, please send your resume, in confidence, to:

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We seek scientists with demonstrated skills in the area of mammalian expression systems to develop programs focused on using proprietary technology for transfecting genes into cultured cells and animal models. Particular emphasis will be placed on exploring approaches for improving the level of expression of human genes that will be used therapeutically.

BS/MS Scientists Cell/Molecular Biology

We seek scientists who wish to participate as members of interactive teams. Cell biologists should be familiar with a range of cell biology/biochemistry methods. Molecular biologists should have proven skills in DNA/RNA isolation, Northern/Southern blotting, plasmid preps, PCR, etc.

Ph.D. Cell/Receptor Biologist

Scientist with experience in general cell biology and receptor-mediated endocytosis. Individual will have responsibility to establish a program that will expand our novel receptor-mediated system and to improve delivery of DNA.

TargeTech, Inc. is committed to providing a nurturing environment for creative, highly motivated scientists by offering competitive salaries, comprehensive benefits package and equity participation in the company. Submit resumes to: **TargeTech, Inc., 290 Pratt St., Meriden, CT 06450.** We are an equal opportunity employer.





AGENCY FOR INTERNATIONAL DEVELOPMENT

Office of Agriculture Bureau for Science and Technology announces Agricultural Biotechnology for

Sustainable Productivity Project

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Food and Agriculture Branch A.I.D./Washington Projects Division Office of Procurement Agency for International Development Washington, D.C. 20523-1427

Additional details will be contained in the RFA which will be issued O/A May 24, 1991. All responsible public and private institutions may submit an Application which shall be considered by A.I.D. Questions may be addressed to Contract Specialist, Eric R. Bolstad or Contracting Officer, Jay M. Bergman at 703-875-1155.

The Agency for International Development, Office of Agriculture, is seeking applications for a cooperative agreement and one subagreement from U.S. public and private institutions interested in collaborating with developing country institutions through a new project in plant biotechnology. The project focuses on integrated applications of biotechnology to address priority constraints to productivity not yet resolved through conventional technologies. Its design addresses priorities established in a National Research Council report entitled "Plant Biotechnology Research for Developing Countries", requested by A.I.D. and responds to technical and institutional needs of mutual benefit to U.S. and developing country agricultural institutions.



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SCIENCE Magazine New Lab Service Department 1515 Broadway New York, NY 10036 TSI Corporation, a dynamic, growth-oriented life sciences company, has outstanding opportunities for scientists with vision and leadership skills. The incumbents are expected to play a significant role in the selection of future areas of research and will carry out high quality work warranting publication in peerreviewed journals. Join us and play a key role in helping us achieve market preeminence.

MOLECULAR BIOLOGISTS Transgenic Animal Research

We have immediate openings in our Transgenic Animal Research Program. Working with a team of cell biologists, pathologists, biochemists and reproductive scientists, successful candidates will conduct research in selected therapeutic areas related to the discovery and development of important animal disease models.

Principal Scientists (4 positions)

Ph.D. degree in Molecular Biology, and a minimum of 4 years' independent postdoctoral research experience in recombinant DNA technology applied to one or more of the following areas: Virology, Oncology, Immunology, and/or Neurophysiology. Candidates should have demonstrated experience in studies involving the regulation of mammalian gene expression, differentiation, gene transfer technology, and/or embryonal stem cell transformation. Prior industrial experience is highly desirable.

Assistant/Associate Scientists (2 positions)

BA/BS or MA/MS and a minimum of 2 years' relevant work experience in Molecular Biology. Proficiency in a variety of techniques (including PCR, gel electrophoresis, DNA synthesis and sequencing, and mammalian cell culture) is essential.

IMMUNOLOGISTS

Working with a multidisciplinary team, the successful candidates will conduct research and development of a variety of blood products, antibodies and chromogens for various diagnostic test kits.

Principal Scientists (2 positions) • Worcester, MA • Washington, DC area

• Worcester, MA • Washington, DC area Ph.D. in Immunology/Immunochemistry and a minimum of 4 years' independent postdoctoral research. Candidates should have demonstrated experience in a variety of cell biology and immunoassay techniques and methodologies, as well as the preparation and characterization of polyclonal antisera and monoclonal antibodies. Prior industrial experience is highly desirable.

Headquartered in Worcester, MA, TSI Corporation offers an excellent salary and benefits package with an opportunity to make a major impact on the future growth of the company as a key member of management. Relocation assistance is available. For consideration, please send your resume and compensation history to: V.P., Human Resources, TSI Corporation, Innovation Drive, Worcester, MA 01605.

TSI Corporation is an Equal Opportunity Employer. Principals only. No phone calls please.



POSTDOCTORAL FELLOW. Developmental cellular neurobiology. Available to participate in research on the role of neural/glial interactions and trophic factors on neuronal survival and development. Background and interest in cell culture or molecular biological approaches to development desirable. Please send curriculum vitae and names of references to: Dr. Herbert M. Geller, Department of Pharmacology, UMDNJ-Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854–5635. The UMDNJ is an Affirmative Action/Equal Employment Opportunity Employer, M/F/H/V, and a member of the University Health System of New Jersey.



POSTDOCTORAL FELLOW. Position open for postdoctoral fellow to study systemic and renal hemodynamics and changes in vasoactive humoral substances before and after altered divalent ion nutrition. Ph.D. in physiology or pharmacology required. This position is for 2 years of support. Salary is negotiable. Closing date: 1 June 1991. Submit curriculum vitae to: Edward T. Zawada, Jr., M.D., Professor and Chairman, University of South Dakota School of Medicine, P.O. Box 5046, Sioux Falls, SD 57117-5046. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIPS. In gastroenterological research available for two or more years beginning 1991. Faculty employs multidisciplinary approach using biochemical, cell/molecular biological, immunological, physiological, and electrophysiological techniques. Applicant may focus on clinical and/or basic studies. Applicant may focus on clinical and/or basic curriculum vitae and names of three references to: N. F. LaRusso, M.D., Program Director, NIH Training Grant, Mayo Clinic, Rochester, MN 55905. Mayo Foundation is an Affirmative Action/Equal Opportunity Educator and Employer.

JOHNS HOPKINS/MONSANTO GLYCO-SCIENCES POSTDOCTORAL FELLOW. Position available immediately in the Departments of Biological Chemistry and Pharmacology, Johns Hopkins University School of Medicine, 725 North Wolfe Street, Baltimore, MD 21205, to participate in a collaborative investigation of cytoplasmic and nuclear glycosylation in cells infected with Cytomegalo- or Herpes-viruses. Send (prior to 15 June 1991) curriculum vitae and names and addresses of three references to: Drs. Gerald W. Hart and Wade Gibson at the above address. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL/RESEARCH ASSOCIATE IN CLINICAL CYTOGENETICS

Training position for ABMG certification in clinical cytogenetics, Ph.D. in biological sciences/genetics with some experience in human cytogenetics required. Research interest in cancer cytogenetics and/or application of in situ hybridization to diagnosis and gene mapping preferred.

POSTDOCTORAL/RESEARCH ASSOCIATE IN MOLECULAR GENETICS

Research position in molecular applications for diagnosis of inherited diseases including cancer. Ph.D. in biological sciences and experience in molecular biology required.

EMBRYOLOGIST/STAFF SCIENTIST

Research and clinical position to establish a program in pre-implantation genetics to complement active molecular and cytogenetic diagnostic programs. Ph.D. with experience in vitro fertilization and ultrasound guidance of oocyte transfer. Research interest in human genetics preferred.

Curriculum vitae and names of three references to: Medical Genetics Search Committee, H. A. Chapman Research Institute of Medical Genetics, Children's Medical Center, 5300 East Skelly Drive, Tulsa, OK 74135.

74135. The institute has research activities in the areas of cytogenetics, molecular genetics, and clinical genetics. Approximately 25 researchers, technologists, and support staff are employed. Specialized instrumentation of the laboratories include a Cytoscan automated karyotyping system, DNA core facility including DNA automated sequencer and thermal cyclers.

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE. Position available to study the development of conducting polymer electrodes for battery applications and to conduct in-depth research utilizing electrochemical, impedance spectroscopy, rotating disc electrode, and cyclic voltammetry techniques. Forty hours per week; salary: \$22,000 per year. Requires Ph.D. in electrochemistry and 6 months of experience in job duties or as battery researcher. Apply at: The Texas Employment Commission, Arlington, Texas, or send résumé to: The Texas Employment Commission, TEC Building, Austin, TX 78778. J.O. #5757277. Ad paid by an Equal Opportunity Employment Employer.

POSTDOCTORAL RESEARCH ASSOCIATE POSITIONS AVAILABLE

 IMMUNOLOGIST: To raise and characterize antibody against carbohydrate determinants. Work involves immunohistochemistry and production of idiotypic antibodies. Experience in protein purification and affinity chromatography helpful.
 BIOCHEMIST: To investigate human glycosylultication and the protein protein purification and proselement of the protein prote

 BIOCHEMIST: To investigate human glycosyltransferases. Work involves glycoconjugate metabolism and enzymology. Experience in protein purification and affinity methods helpful.
 CARBOHYDRATE CHEMIST: To develop

 CARBOHYDRATE CHEMIST: To develop syntheses of complex carbohydrates. Work involves NMR studies and chromatography. Experience with HPLC helpful.

Immediate openings. Send curriculum vitae and two references to: Dr. Kushi L. Matta, Roswell Park Cancer Institute, Elm and Carlton Streets, Buffalo, NY 14263. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

Available for a recent Ph.D. to study the physiology and pharmacology of single identified mammalian midbrain dopamine-containing neurons during postnatal development using electrophysiological recording techniques. Previous experience with small animal surgery preferred. Send curriculum vitae and names of three references to: Dr. David K. Pitts, Department of Pharmaceutical Sciences, Room 528 Shapero Hall, Wayne State University, Detroit, MI 48202. Wayne State University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL/RESEARCH ASSOCIATE

This position is a dual appointment to McLean Hospital and Harvard Medical School. Research concerns the molecular neurobiology of proteases and roles in cell regulation, signal transduction, and neurodegenerative disease. Interest or background in tissue culture, protein/ peptide analytical techniques, or molecular genetics desirable.

Interested candidates, please send curriculum vitae to: Ralph A. Nixon, M.D., Ph.D., Laboratories for Molecular Neuroscience and Aging Research, Mailman Research Center, McLean Hospital, 115 Mill Street, Belmont, MA 02178. An Equal Opportunity Employer.

POSTDOCTORAL RESEARCH POSITION IN MOLECULAR/QUANTITATIVE GENETICS

A postdoctoral research associate position is available immediately to work on the genetic and molecular basis of quantitative variation. Research will include mapping loci causing variation for *Drosophila melanogaster* bristle traits in natural populations, and determining the extent to which variation in loci involved in bristle development contribute to naturally occurring variation in bristle number. Experience with *Drosophila* genetics and molecular biology required; knowledge of quantitative genetics is an asset. Send curriculum vitae and three letters of reference to: Dr. Trudy F. C. Mackay, Department of Genetics, Box 7614, North Carolina State University, Raleigh, NC 27695–7612. North Carolina State University is an Affirmative Action/Equal Opportunity Employer.

RESEARCH SCIENTIST—MECHANICS/AP-PLIED MATHEMATICS: Research involving mathematical analysis of microcirculatory transport phenomena. Requires Ph.D. in applied mathematics plus familiarity with oxygen transport phenomena. Forty hours per week, 9:00 a.m. to 5:00 p.m.; salary: \$25,000 per year. Respond by résumé only to: Job Order #4417530, Bethlehem Job Center, 55-61 West Walnut Street, Bethlehem, PA 18018–1157.

POSITIONS OPEN

UNIVERSITY OF CALIFORNIA, IRVINE POSTDOCTORAL RESEARCH IN PSYCHOBIOLOGY

The Department of Psychobiology, University of California, Irvine (UCI), anticipates filling several postdoctoral research positions in the laboratories of the faculty with starting dates between 1 May 1991 and 30 April 1992. The current faculty and their research interests are: D. Aswad (neurochemistry); C. Cotman (synaptic growth and plasticity); R. Frostig (optical recording and network analysis); R. Josephson (comparative physiology of muscles); H. Killackey (developmental neuroanatomy); M. Leon (neurobiology of early learning); G. Lynch (physiology, neurochemistry); J. Marshall (neural plasticity of catecholamines); J. McGaugh (memory, storage processes); R. Miledi (synaptic physiology and molecular neurobiology); R. Neve (molecular neurobiology of Alzheimer's disease), I. Parker (synaptic physiology); A. Starr (cognition, sensation, and evoked potentials); K. Sumikawa (molecular neurobiology); N. Weinberger (neural mechanisms of learning); an P. Yahr (neuroendocrinology and behavior). Candidates should address inquiries to: **Postdoctoral**

Candidates should address inquiries to: Postdoctoral Research Advisor, Department of Psychobiology, University of California, Irvine, CA 92717.

The University of California is an Equal Opportunity/ Affirmative Action Employer. The department encourages female and minority applicants.

RESEARCH IN EXPERIMENTAL PATHOLOGY AND MOLECULAR PATHOBIOLOGY LEADING TO THE Ph.D.

Expanded faculty and state-of-the-art facilities; stipends of \$13,000 and up per year including full tuition waivers; attractive campus in suburban Westchester close to New York City; expedited review process and flexible entrance times for promising candidates. Contact: **Dr. Michael B. Stemerman, Professor and**

Contact: Dr. Michael B. Stemerman, Professor and Chairman, Department of Experimental Pathology, New York Medical College, Valhalla, NY 10595. Telephone: 914-993-4146.

Equal Opportunity Employer.

ENVIRONMENTAL SOCIOLOGIST/SOCIO-ECONOMIC IMPACT ANALYST. Argonne National Laboratory's Social and Natural Resources Section seeks a social scientist. The ideal candidate will possess a Ph.D. in sociology, geography, planning, natural resource management, or related discipline and considerable experience in environmental impact assessment. Responsibilities include conducting research and assessment work on socioeconomic impacts related to large federal facilities, hazardous waste cleanup, and energyrelated facilities. Must have a proven record of publication.

We offer an excellent salary commensurate with your background, as well as a comprehensive benefits plan. For prompt consideration, send a detailed résumé to: Susan Walker, Box J-EID-85371/85372-55, Employment and Placement, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, IL 60439. Argonne is an Equal Opportunity/Affirmative Action Employer.

ENVIRONMENTAL SCIENTIST, GS 12/13 (\$37,294 to \$57,650). The U.S. EPA (Environmental Protection Agency) Environmental Monitoring Systems Laboratory, Las Vegas, Nevada (EMSL-LV), is seeking an experienced individual with a bachelor's or higher level degree in the area of physical/biological sciences to work in the area of exposure assessment from environmental contaminants, with primary emphasis on developing methods for modeling total human exposure. The incumbent must have education and/or chemistry, and/or statistics. Experience and knowledge of exposure processes and exposure assessment procedures for total human exposure/dose estimation, especially predictive models, both deterministic and stochastic is desirable. Individual would assist in directing research to develop methods for modeling total human exposure, provide guidance for the selection of pollutants to be studied, act as a technical monitor or publish results of resposure modeling and monitoring. *EPA is an Equal Opportunity Employer. Applicant must be a U.S. citizen*. All inquiries and requests for application materials should be made to: **U.S. EPA**, **Human Resources Office, P.O. Box 98516, Las Vegas, NV 89193–8516 by 30 May 1991**.

SOMATIX THERAPY CORPORATION

Somatix Therapy Corporation is a leading biotechnology company utilizing gene transfer and cellular trans-plantation technologies to develop cell-based protein delivery systems for human therapeutics. Positions are available immediately for highly motivated and qualified RESEARCH SCIENTISTS. Currently seeking

RESEARCH SCIENTISTS. Currently seeking three Ph.D.-level scientists in cell biology, virology, and molecular biology with a minimum of 2 years of post-doctoral experience. The successful candidates will have research experience in gene transfer technologies or primary cell culture systems. Preference will be given to individual with experience in extension of the previous individuals with experience in retrovirology, retroviral vectors, homologous recombination or isolation, and characterization of mammalian cells in primary culture. RESEARCH ASSOCIATES. Positions are open for

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STAFF SCIENTIST IN MOLECULAR BIOLOGY

The Molecular Biology Research Program at the Henry Ford Hospital is undergoing a 5-year expansion that will entail recruitment of four additional Staff Scientists in molecular biology. We prefer an individual who has a commitment to the area of oncogenes or mammalian gene transcription, but other applicants will be considered. The applicant will be expected to develop an active and externally funded research program, and will have limited teaching responsibilities. Generous and contin-ued support is available. Send curriculum vitae with a list of publications, representative reprints, three letters of recommendation, and a summary of research plans to: Dr. Svend O. Freytag, Molecular Biology Research Program, Education and Research Building, Room 7041, Henry Ford Hospital, 2799 West Grand Bou-levard, Detroit, MI 48202.

RESEARCH SCIENTIST. To engage in experimental and integrated computational research in the physics of synchrotron emission spectroscopy related to fusion plasmas and charged particle beams involving studies of ion sources and beam transport in accelerators. Requirements: Ph.D. in physics. Proven skill in design of plasma diagnostic instruments, fast electronics, mechanvisia utagriotic instruments, rast electronics, incertain-ical systems for beam research, and computational anal-ysis and integrated computer knowledge. Will supervise two people. Five-day, 40-hour week; salary: \$43,921 per year. Job location: College Park, Maryland. Send résumé with copy of this ad to: Job order #9048118, Department of Economic and Employment Development, Room #212, 1100 North Eutaw Street, Baltimore, MD 21201 by no later than 30 days from publication date. Proof of legal right to work in United States required.

RESEARCH SCIENTIST, GROUP LEADER, signal transduction. Manages and exercises responsibility for a research group of scientists and research profession als in the area of cardiovascular biochemistry and pharmacology within Pharmaceutical Discovery Division. Generates and stimulates research directions involving purification and characterization of soluble and membrane-bound enzymes participating in signal transduc-tion processes (primarily guanylate cyclase and EDRF synthase). Stimulates research in developing and applying drugs to regulate these systems in the cardiovascular and other systems. Ph.D. in biochemistry required to-gether with 3 years of experience in the job offered or 3 years of experience as professor or visiting scientist. Research experience on the mechanisms of biosynthesis Research experience on the mechanisms of biosynthesis of the enzyme alkalyne phosphatase both in intact cells and in cell-free systems. Further research must include development and application of modified cardiac glyco-sides. Forty hours per week, Monday to Friday, 8:15 a.m. to 4:55 p.m.; \$6250 per month. Must have proof of legal authority to work permanently in the United States. Send résumé and Social Security Number to: Illinois Department of Employment Security, 401 South State Street—3 South, Chicago, IL 60605, Attention: D. Rule, Reference # V-IL-2465-R. No calls. An employer-paid ad. employer-paid ad.

10 MAY 1991

PROTEIN BIOCHEMIST

Cangene Corporation, The Canadlan Genetic Engineering Company, has developed a new and novel expression technology which the Company is using to produce a range of biopharmaceuticals. The Company is seeking an outstanding individual to fill a challenging position within its Biochemistry Group.

The selected candidate will contribute to the direction of the research of microbial proteases related to the Company's expression system and apply existing techniques or develop new methodologies for their isolation, purification and characterization. This individual will also be responsible for developing the knowledge required for the understanding of the proteases mechanism of action and their activity Inhibition.

The successful candidate will have:

- A Ph.D in an area related to Chemistry/Biochemistry of proteins
 Strong updated scientific background and at least three years of post-graduate experience in the area of protease activity and its Inhibition
 Sound experience in isolation, purification and characterization of
- Sound experience in isolation, purincation and characterization proteins, preferably proteases
 Ability to scientifically direct and manage small project team
 Sound verbal and written communication skills
 Ability to interact in an interdisciplinary manner.

Cangene Corporation is located near Toronto, one of North America's most livable cities. The Company offers an attractive compensation package and the opportunity to work in a highly creative, goal-oriented atmosphere.

Candidates are required to submit, in strictest confidence, quoting file #0529B, their curriculum vitae and the names of three referees to: Manager, Human Resources, Cangene Corporation, 3403 American Drive, Mississauga, Ontario, Canada L4V 1T4.



PEPTIDE CHEMIST

Position available immediately for qualified peptide chemist to work in the Biological Resources Branch, National Institute of Allergy & Infectious Diseases, National Institutes of Health. Candidate should have expertise in synthesis, in purification and analysis of peptides. Experi-ence in protein chemistry including compositional and sequence analysis would be helpful. Laboratory management experi-ence is desirable. Plenty of resources available. Salary will be commensurate with credentials.

Qualified and interested candidates should send curr-culum vitae and names and addresses of three (3) references to

John E. Coligan, Ph.D., Chief **Biological Resources Branch** NIAID, NIH Building 4, Room 413 9000 Rockville Pike Bethesda, MD 20892 (301) 496-3213

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CALL FOR RESEARCH PROPOSALS

GENE SHEARS PTY LTD a biotechnology company based in Canberra (Australia) is developing ribozyme technology and its applications in life sciences.

To improve the development of basic know-ledge and applications of ribozyme functions, **GENE SHEARS** is looking for partners in research programs.

GENE SHEARS will fund research projects on:

- ribozyme structure and functions delivery of ribozymes in human, animal, plant and
- microorganism systems * activity, expression and stability of ribozymes in
- transgenic organisms
- * applications of ribozyme technology in life sciences research into commercially important genetic targets for ribozyme activity

Research proposals will be evaluated by the company's scientific committee. The company will then develop collaborative arrangements with selected proposals.

For opportunities in this exciting research area, further information and details of format for the preliminary research proposals can be obtained from:

> Gene Shears Pty Limited GPO Box 1600 Canberra ACT 2601 AUSTRALIA Intl. Facsimile No. 61.6 2465000

The closing date for preliminary research proposals will be June 7, 1991.

ENVIRONMENTAL SCIENTIST, GS-13 (\$44,348 to \$57,650). The U.S. EPA (Environmental Protection Agency) Environmental Monitoring Systems Laboratory, Las Vegas, Nevada (EMSL-LV), is seeking an experienced individual with bachelor's or higher level degree in the area of physical or biological sciences to work in area of exposure assessment from environmental contaminants; primary emphasis to develop methods for measuring and modeling exposure. Individual must have education or experience in engineering science, chemical engineering or chemistry, or biological sciences. The interested individual should have experience in dermal exposure assessment processes, models, current procedures and techniques is desirable. Individual would direct research to develop methods for measuring and modeling exposure, provide guidance to select pollutants to be studied, act as a technical monitor or project officer to supervise contracts, write reports, and publish results of research. The EMSL-LV has ongoing projects in exposure, modeling, and monitoring. EPA is an Equal Opportunity Employer. Applicant must be a U.S. citizen. All inquiries and requests for application materials should be made to: U.S. EPA, Human Resources Office, P.O. Box 88516, Las Vegas, NV 89193–8516 postmarked by 30 May 1991.

IMMUNOCHEMIST AND IMMUNOLOGIST. National Cancer Institute, National Institutes of Health (NIH), Public Health Service, is seeking applicants for the following positions: IMMUNOCHEMIST: To work closely with molecular biologist and immunologists to define new strategies and methodologies for the radiolabeling and analysis of novel genetically engineered forms of training. IMMUNOLOGIST: To analyze and define the host's immune response in antitumor active immunotherapy systems using recombinant vaccinia constructs, peptides, etc., and study the interactions of various effector cell populations with novel recombinant forms of Ig's; will also interact with molecular biologists in gene therapy experiments. Preference for at least 3 years of postdoctoral training. Salary commensurate with experience. Please submit curriculum vitae, bibliography, and names of three references to: Dr. Jeffrey Schlom, Laboratory of Tumor Immunology and Biology, National Cancer Institute, Building 10, Room 8B07, NIH, 9000 Rockville Pike, Bethesda, MD 20892. U.S. citizenship and/or permanent residency required depending upon type of appointment. An Equal Opportunity Employer.

SENIOR RESEARCH ASSOCIATE. Specialties: molecular biology/immunology. Able to work independently. Join in research on immunity to parasites relative to age. Applicants who hold a Ph.D. or M.D. should send curriculum vitae, references, and a statement of research interests to: Dr. Julia W. Albright, Department of Microbiology and Immunology George Washington University Medical Center, 2300 Eye Street, N.W., Washington, DC 20037. An Equal Opportunity/Affirmative Action Employer.

SENIOR RESEARCH ASSOCIATE

Position available immediately for a motivated scientist to participate and develop research programs in sitedirected mutagenesis of gonadotropic hormones, receptors, and gonadal proteins. Ph.D. biochemistry/endocrinologist with some experience in molecular cloning, expression, and gene regulation will be given preference. Apply with statement of interests, résumé, and three letters of reference to: Dr. M. R. Sairam, Director, Reproduction Research Laboratory, Clinical Research Institute of Montreal, Montreal, Québec, Canada H2W 1R7. Telephone: 514-987-5582.

STAFF RESEARCH ASSOCIATE. To conduct research on oceanic circulation in tropical regions; and to develop techniques for assimilation of satellite measurements of sea surface height into ocean general circulation models. Requirements: Ph.D. in atmospheric and oceanic sciences with research emphasis on ocean-atmosphere interactions. Expertise in computer modeling of the ocean, and in the analysis of model results. Experience in the use of ocean general circulation models for climate studies, and in the use of supercomputers. Knowledge of computer models of the atmosphere.

Job location/interview: Los Angeles. Salary: \$32,500 per year. Send this ad and résumé to: Job #CR4177, P.O. Box 9560, Sacramento, CA 95823-0560, no later than 25 May 1991.

POSITIONS OPEN

RESEARCH ASSOCIATE IN ELECTROPHYS-IOLOGY. Position available July 1991 for a recent Ph.D. to study atrial natriuretic peptide regulation and pathological IgG inhibition of voltage-gated Ca²⁺ channels and their role in the control of aldosterone and catecholamine secretion. Experience with the patch clamp technique is preferred. Send résumé and three references to: Yong I. Kim, Ph.D. (Biomedical Engineering) and Paula Q. Barrett, Ph.D. (Pharmacology), Box 377, University of Virginia Health Sciences Center, Charlottesville, VA 22908.

CANCER RESEARCH SCIENTIST. Cancer rearch in relation to biological membranes, including membrane lipid and protein isolation, purification, analyses, and reconstitution. Use of electron microscopy, x-ray diffraction, fluorescence spectroscopy, NMR, light scattering, and differential scanning calorimetry. Assays for membrane transport and fusion. Analyze data, write research proposals, publish results, and supervise re-search technicians; 8:30 a.m. to 5:00 p.m.; 40 hours per week. Requires 2 years of experience in the job described. Otherwise, at least 3 years of postdoctoral research on the structure and phase behavior of membrane lipids using biophysical methods, x-ray diffraction, electron microscopy, fluorescence spectroscopy, differential scanning calorimetry, and model building; isolation, purification, and analyses of membrane lipids; biochemical modification of lipid composition in membranes; at least 1 year of postdoctoral research on membrane isolation and purification; purification of membrane proteins; reconstitution of membrane proteins and lipids and assaying recombinant for biological activity and the structure by biophys-ical methods. Must have published at least five research papers in the above areas in peer-reviewed scientific ournals. Salary: \$35,849. Refer to **Order # 0702292**. Send résumé in duplicate to: New York State Job Service, Attention: Ms. P. Oldenburg, 68 West Huron Street, Buffalo, NY 14202.

RESEARCH FELLOW. For northeastern Ohio hospital to perform microsurgical and microvascular research using microvascular surgery techniques and anastomosis of very small vessels on animals; research peripheral nerve healing, prostaglandins and ischemia, and flap monitoring on patients after microvascular surgery. No experience required in above duties but applicants will qualify with M.D. degree, 6 months of experience as a research assistant or physician (experience must be in microsurgery involving vessels of diameter of 1.4 millimeters), and must have published at least two medical articles in the field of repair and reconstruction using microsurgery. Monday thru Friday, 8:00 a.m. to 5:30 p.m.; salary: \$28,500 per year. *Must have proof of legal authority to work permanently in the United States.* Send résumé in duplicate (no calls) to: S. Holton, Job Order Number 1255696, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

ANNOUNCEMENTS

PALO ALTO INSTITUTE FOR MOLECULAR MEDICINE

Fledgling nonprofit basic research institute located in Palo Alto, California, searching for biomedical scientists with RO1 or other funding. Work near the birthplace of biotechnology! Send curriculum vitae and research interests to: Research, Box 294, Redwood City, CA 94064. Telephone: 415-851-3959.

MEETINGS

ANNOUNCEMENT AND CALL FOR ABSTRACTS CONTEMPORARY DEVELOPMENTS IN SALIVARY RESEARCH

6 to 10 November 1991, Buffalo Marriott, Buffalo, New York. The scientific program of this NIDR-sponsored conference will consist of lectures and poster presentations by invited scientists in three areas: salivary secretions and dysfunction, salivary glands-intracellular processes, salivary gland gene expression and development. Submission of abstracts for additional poster presentations is encouraged. Contact: Dr. Michael J. Levine, University at Buffalo, Department of Oral Biology, 109 Foster Hall, Buffalo, NY 14214. Telephone: 716-831-2114; FAX: 716-831-3942.

COURSES AND TRAINING

BIOLOGICAL AND MOLECULAR APPLICA-TIONS OF MODERN SCANNING PROBE MI-CROSCOPIES; 18 and 19 September 1991. A handson workshop sponsored by the Center for Biopolymers at Interfaces, Department of Bioengineering, University of Utah. This workshop consists of lectures, a poster session, and demonstrations of atomic force and scanning tunneling microscopies. For information, contact: Arline Allen, 2260 Merrill Engineering Building, Salt Lake City, UT 84112. Telephone: 801-581-3867.

BIOLOGICAL FLUID DYNAMICS WORKSHOP: MODELING FLOWS WITH IMMERSED ELASTIC STRUCTURES PITTSBURGH SUPERCOMPUTING CENTER 28 TO 31 JULY 1991

Lisa Fauci of Tulane, Aaron Fogelson of Utah, and David McQueen of New York University will focus on supercomputing resources applied to biological fluid dynamics problems. Previous supercomputing experience is not necessary. Support is from NIH's National Center for Research Resources. To apply contact: Nancy Kiser, PSC, 4400 Fifth Avenue, Pittsburgh, PA 15213. Deadline is 14 June 1991.

DOCTORAL STUDENTS in social or natural sciences are invited to apply to participate in the Fourth Annual Global Change Institute (GCI) sponsored by the University Corporation for Atmospheric Research Office for Interdisciplinary Earth Studies. The theme of this year's institute is Global Land Use/Cover Change and will take place in Snowmass, Colorado, from 29 July through 9 August 1991. For purposes of definition, we distinguish between "land use" (the study of the human causes that bring about changes in land cover) and "land cover" itself (the description or classification of the surface of the Earth). The 1991 institute will examine the changes in land use, land cover, and the physical, chemical, and biological environment of the Earth. All travel and living expenses will be provided to the five selected candidates. Apply by submitting letter of interest, curriculum vitae, and faculty advisor letter of recommendation by 29 May 1991 to: Dr. John A. Eddy, Director, Office for Interdisciplinary Earth Studies, P.O. Box 3000, Boulder, CO 80303. You may also send application materials by facsimile to 303-497-1679. To request further information about the institute, please contact: Barbara Anderson, FAX: 303-497-1679, telephone: 303-497-1686. Notification of acceptance will be made on 17 June 1991. Application is limited to graduate students now pursuing a Ph.D. Unfortunately, we cannot accept applications from postdoctoral fellows.

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