

Color Imager

The EDC-1000C high-resolution color camera now has software that allows it to interface directly to an IBM-compatible personal computer and digitize images into 8 bits each of red, green, and blue for storage in the computer's memory. The camera features a frame transfer charge-coupled device image sensor that provides a resolution of 751 by 244 pixels noninterlaced or 751 by 488 pixels interlaced. **Electrim Corp. Circle 139.**

Genomic DNA Isolation Kits

Two new genomic DNA isolation kits make purification of high molecular weight DNA as easy as filtration. The Blood DNA Isolation Kit is designed to isolate DNA directly from whole blood or lymphocyte preparations; the Cell Culture DNA Kit is used for tissue culture cells and single cell suspensions. In less than 3 hours, with only 30 min of hands-on time, the kits provide pure genomic DNA ranging in size from 50 to 140 kb. **QIAGEN. Circle 140.**

Sequencing System

Hot Tub DNA sequencing system is for sequencing DNA containing compressed sequences or high levels of secondary structure. In addition to standard dideoxy sequencing, the system can also be used for cycle sequencing of small quantities of template or less pure DNA. The system is based on Hot Tub DNA polymerase, a thermostable enzyme with high processivity and polymerization rate. The inclusion of two further denaturing factors—7-deaza deoxyguanosine triphosphate and formamide—enhances processivity through double-stranded templates and helps resolve sequence compressions. For cycle sequencing, no prereaction denaturation or annealing is required, and the use of an end-labeled primer protocol eliminates background signals. Amersham International. Circle 141.

Enzyme Conjugate Stabilizer

SuperFreeze conjugate stabilizer offers researchers an alternative to glycerol for enzyme conjugate storage. Unlike most commercially available glycerol, each lot of SuperFreeze conjugate stabilizer is tested for its ability to sustain enzyme activity and provide a buffered antifreeze environment to -20°C. SuperFreeze products also contain preservatives to prevent anti-microbial growth during long-term storage. There are two formulations, one for alkaline phosphatase conjugates and one for horseradish peroxidase conjugates. Pierce. Circle 142.

Kit Removes Contaminants

Plasmid-Safe DNase provides a fast method of selectively and completely removing contaminating bacterial DNA in preparations of plasmid or cosmid DNA. At neutral pH, the enzyme digests linear double-stranded DNA and both closed-circular and linear single-stranded DNA but has no activity on nicked or closed-circular double-stranded DNA. The enzyme removes contaminating bacterial DNA in any plasmid preparation, effectively eliminating the possibility of subcloning or sequencing contaminant DNA. The enzyme can be inactivated by incubation at 70°C for 15 min. Epicentre Technologies. Circle 143.

Molecular Weight Markers

The BioMarker family of electrophoresis markers is for precise determination of amplified DNA product size and estimation of product vield. Each marker contains a series of discrete linear doubled-stranded DNA bands of homogeneous structure, known intensity, and accurate base pair number. Each is designed to provide fully resolved bands without the anomalous migration often seen with markers produced from restriction fragments. BioMarkers are available in three molecular weight ranges: for bands from 50 to 2500 base pairs (bp); from 50 to 1000 bp, and from 1000 to 3000 bp. They are available stained by ethidium bromide or with a nonradioactive biotin label. AT Biochem. Circle 144.

Cell Sorting and Analysis

The FACS Vantage is an advanced flow cytometer that performs high-speed cell sorting and analysis. Features include fivecolor fluorescence and three-laser cell sorter capability. A wide



range of air- and water-cooled lasers is available, including mixed gas and argon ion. The open architecture system can be easily upgraded with multiple options,

from lasers to automation enhancements. Features include a computerized setup that eliminates complex calculations, an option for large-particle analysis and sorting, and a module that allows the researcher to define sort criteria with up to eight cell population regions drawn in various sizes and shapes. Becton Dickinson Immunocytometry Systems. Circle 145.

Literature

1993 LC Laboratories Catalog lists more than 200 new products in a line of chemical reagents, enzyme inhibitors, and compounds for biological signal transduction and second messenger research. LC Labs. Circle 146.

Separation Times is a quarterly newsletter on high-performance liquid chromatography that includes technical information, science news, and new product information. **Phenomenex. Circle 147.**

InSIGHT Plus Laser Scanning Confocal Microscope: The New Generation of Confocal Microscope describes the capabilities, specifications, and applications of this instrument. Meridian Instruments. Circle 148.

Photon Technology International is Ratio Fluorescence is a six-page publication on ratio fluorescence products for various biochemical investigations, including measurement of pH and intracellular ionic calcium, potassium, and sodium concentrations. Noninvasive quantitative photometry and imaging can be performed on tissues, adherent cells, cell suspensions, and individual cells to determine the location of and changes in ion concentrations. Photon Technology International. Circle 149.

Waters Instruments Parts and Supplies provides a comprehensive listing of parts, supplies, and accessories. Millipore. Circle 150.

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

SCIENCE

PERSONNEL PLACEMENT

LINE CLASSIFIED ADVERTISEMENTS

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

 How to Submit a Classified Ad: Prepare double-spaced typewritten copy. Do not include any abbreviations. Science will edit and typeset ads according to *Science* guidelines. Include billing information, and desired publica-tion date. Available categories: Positions Open, Meetings, Announcements, Courses and Training.

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

- Rates: Ads are \$42 per line; \$420 minimum. One line equals 52 characters and spaces; centered headings equal 32 characters and spaces. A 3% cash discount is granted to all prepaid ads.
- Ads from Outside the U.S.: A discount of \$30 will be offered to advertisers making payment in U.S. dollars by checks drawn on U.S. banks. Contact Annemarie Vis at +44 223 302067 (telephone) or +44 223 302068 (FAX).

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

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

DISPLAY PERSONNELADVERTISEMENTS

For rates and info. about fractional display ads (all ads 1/6 page and larger), contact:

> Recruitment Advertising Deborah Cummings Telephone: 202-326-6541

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

Annemarie Vis European Recruitment Advertising Telephone: +44 223 302067 FAX: +44 223 302 068

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, handicap or sexual preference The AAAS encourages employers to actively recruit and employ underrepresented minority groups. Science reserves the right, at its discretion, to decline to publish advertisements submitted to it

POSITIONS OPEN

MEDICAL MYCOLOGISTS

The Department of Dermatology, Case Western Re-serve University (CWRU) and University Hospitals of Cleveland, invites applications for two faculty positions at the **ASSISTANT PROFESSOR** and **PROFESSOR** levels for Ph.D. Medical Mycologists to establish and direct the reference laboratory component of a new Fungal Diseases Research Center. The successful applicants are expected to have a proven expertise in superfi-cial and cutaneous fungal infections, opportunistic art cantifungal susceptibility testing, and molecu-lar strain typing. Responsibilities include direction of the reference laboratory and assisting with the Center's research, clinical trials, and educational programs. Salary commensurate with experience. ABMM or similar certification preferred.

Incation preferred. Interested applicants should apply by sending/faxing curriculum vitae, statement of research interests, and three academic references by July 16, 1993, to: Boni Elewski, M.D., Department of Dermatology, Case Western Reserve University School of Medicine, 2074 Abington Road, Cleveland, OH 44106; FAX: (216) 844-8993. CWRU is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITIONS

The Department of Medical Microbiology and Immu-nology, University of South Florida (USF), College of Medicine, invites applications for tenure-track, ASSIST-ANT/ASSOCIATE PROFESSOR positions available immediately. Successful candidates will be expected to actively participate in teaching M.D. and Ph.D. students, developing new and innovative academic courses, and developing new and innovative academic courses, and establishing an externally funded research program. To be compatible with existing departmental research pro-grams and scientific expertise, applicants with research experience in either molecular immunology or bacterial genetics are preferred. A Ph.D. or M.D. degree, at least two years of postdoctoral experience, and a notable publication/grant record is required. USF provides start-up funds, state-funded salary support, fringe benefits, and modern, expanding research facilities. Please send by September 1, 1993, comprehensive curriculum vitae, statement of research interest, and names of three refer-ences to: Dr. Thomas W. Klein, Chair, Search Com-mittee, University of South Florida, MDC Box 10, 12901 Bruce Downs Boulevard, Tampa, FL 33612. USF is an Equal Opportunity/Equal Access/Affirmative Action Employer. Action Employer.

ASSISTANT PROFESSOR in tumor virology ASSISTANT PROFESSOR in tumor virology within the Division of Microbiology at the New England Regional Primate Research Center and the Department of Microbiology and Molecular Genetics at Harvard Medical School. The successful candidate will be expect-ed to sustain an independent research program on mo-lecular aspects of cancer induction by herpesvirus saimiri and/or public methods and the substantian sectors. and/or papillomaviruses in nonhuman primate systems. Send curriculum vitae and names of references to: Dr. Send curriculum vitae and names of references to: Dr. Ronald C. Desrosiers, New England Regional Pri-mate Research Center, Harvard Medical School, 1 Pine Hill Drive, Box 9102, Southborough, MA 01772-9102. Harvard Medical School is an Equal Opportunity/Affirmative Action Employer.

GENETICS—ASSISTANT PROFESSOR

The Department of Biology, University of Tampa, invites applications for a tenure-track position beginning in August 1994 to teach Genetics, Evolution, Introductory Biology for majors and Biological Science for non-majors. The department is interested in attracting a eukaryotic geneticist with broad training in evolutionary biology to complement the largely marine-oriented faculty in biology. The candidate is expected to engage in research activities that involve undergraduates. Ph.D. required, prior teaching and research experience with undergraduates desirable. Send curriculum vitae, stateundergraduates desirable. Send curriculum vitae, state-ment of teaching philosophy, and research interests, official transcripts, and the names, addresses and tele-phone numbers of three references who are willing to provide letters of recommendation. Review of applica-tions will begin in August 1993 and continue until the position is filled. All materials should be addressed to: Genetics Search c/o Human Resources, University of Tampa, 401 West Kennedy Boulevard, Tampa, FL 33606–1490. The University of Tampa is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR OF PHYSIOLOGY. Tenure-track position. Joint appoint-ment in Surgery-ENT/Physiology. Develop/direct new research in secretory function of dark cells in inner ear. Interest in auditory and vestibular ontogeny beneficial. Postdoctoral experience required. Salary negotiable. Send letter and curriculum vitae to: William Davis, M.D., Division of ENT, One Hospital Drive, MA 314, Columbia, MO 65212. The University of Missouri is an Equal Opportunity and Affirmative Action Employer. Women and minorities encouraged to apply. The University complies with the guidelines of the Americans with Disabili-ties Act of 1990. If you have special needs as addressed by the ADA and need assistance, notify us at the above address. Reasonable efforts will be made to accommodate your special needs.

ASSISTANT/ASSOCIATE PROFESSOR DEPARTMENT OF PATHOLOGY BRIGHAM & WOMEN'S HOSPITAL AND HARVARD MEDICAL SCHOOL

The Division of Molecular Oncology in the Depart-ment of Pathology at Brigham and Women's Hospital and Harvard Medical School is seeking an M.D., Ph.D., or M.D./Ph.D., research scientist to be appointed at the assistant or associate professor level (tenure-track). Candidates should have a strong research background reflect-ed in a record of significant publications. Any area of ed in a record of significant publications. Any area of molecularly based research generally relevant to growth control, gene expression, signal transduction, or the biology of disease is appropriate. Please send curriculum vitae and names and addresses of three references to: Dr. Jeffrey Sklar, Department of Pathology, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115. Brigham and Women's Hospital is an Affirmative Action/Equal Opportunity Employer.

MR FACULTY

CHEMIST. Non-tenure-track RESEARCH AS-SISTANT PROFESSOR position available in the De-partment of Radiology, University of Pennsylvania. The successful applicant will be expected to join a strong research team in developing new imaging agents; specific emphasis will be conducting research in the development of new agents for *in vivo* magnetic resonance imaging, attracting extramural funding, and teaching at the grad-uate level. Candidates should have a Ph.D. degree in medicinal and/or organic chemistry with working medicinal and/or organic chemistry, with working knowledge of MR imaging.

PET/SPECT FACULTY

CHEMIST. Non-tenure-track RESEARCH AS-SISTANT PROFESSOR position available in the De-partment of Radiology, University of Pennsylvania. Can-didates must have a Ph.D. degree, with strong back-ground in synthetic organic or medicinal chemistry. Expertise in organic synthesis and modern analytical techniques is highly desirable. Applicants are expected to join a multidisciplinary research team working closely with pharmacologists, medical physicists, and radio-chemists in developing new imaging agents for PET and SPECT radiopharmaceuticals. Please send résumé to: Hank F. Kung, Ph.D., De-partment of Radiology, University of Pennsylvania, PA 19104. The University of Pennsylvania is an Equal Oppor-

19104. The University of Pennsylvania is an Equal Opportunity Employer.

The Department of Chemistry of Yale University solicits applications for a tenured position in organic chemistry at the level of **PROFESSOR** in the disciplines of organic synthesis and/or bio-organic chemistry. An outstanding teacher-scholar's research interests should

outstanding teacher-scholar's research interests should complement those of the current faculty. The position is expected to be filled for the academic year 1994. Applicants should submit curriculum vitae and a list of publications to: Kenneth B. Wiberg, Chair, Senior Organic Search Committee, Department of Chemis-try, Yale University, 225 Prospect Street, Box 6666, New Haven, CT 06511–8118 by September 1, 1993. Yale University is an Equal Opportunity/Affirmative Action Employer. Employer.

WYETH-AYERST RESEARCH

Opportunities in the Division of Cardiovascular and Metabolic Disorders

Wyeth-Ayerst Laboratories, a Division of Fortune 100 American Home Products Corporation, has the following opportunities available within the division of Cardiovascular and Metabolic Disorders at our pharmaceutical research facility in Princeton, New Jersey.

Ph.D. - Diabetes

Join a discovery research team focused on mechanisms of insulin resistance and their relationship to non-insulin dependent diabetes mellitus. Responsibilities include using cellular models of diabetes to obtain insight into mechanisms of insulin resistance in liver and muscle, and the successful treatment of these defects by novel therapeutic agents. Requirements include a Ph.D. in Biochemistry/Physiology/Pharmacology or related discipline with experience in assessing insulin action in cellular systems and expertise in the use of in vivo models of diabetes. (**Position #577**)

Ph.D. – Molecular Biology of Ion Channels

Join a research team involved in the identification of novel ion channel families and their tissue-specific expression within the cardiovascular system. Responsibilities include the characterization of mechanisms underlying transcription and membrane assembly of channel proteins, and the production of stable expression systems for electrophysiological and biochemical study. A Ph.D. in Biochemistry or Molecular Biology with post-doctoral experience in the cloning and expression of ion channel proteins is required. Expertise in the isolation, purification and sequencing of native proteins is also desirable, as is experience with the techniques of in situ hybridization, quantitative PCR, site directed mutagenesis and immunostaining. (Position #383)

Ph.D. – Endothelial Cell Biology

This position will examine endothelial cell function and the role of endothelial cell derived factors in atherosclerosis and vascular diseases. Requirements include a Ph.D. with post-doctoral experience in Biochemistry/Cell Biology/Molecular Biology with a well-established focus on endothelial cell function and growth. Expertise in the isolation, purification and sequencing of native proteins is highly desirable, as is familiarity with quantitative PCR and in situ hybridization. A background in growth factor signalling, cell-matrix interactions and/or cell adhesion molecules is a valuable asset. (Position #515)



B.S./M.S. Electrophysiologist

Become involved in the study of ion channel structure/function, with specific responsibility for the injection of mRNA or DNA into oocytes for expression, and for the conduct of two electrode and patch clamp recordings of expressed cloned ion channels. Requirements include a B.S./M.S. with experience in two electrode voltage clamp and patch clamp techniques. Must have experience in state-of-the-art electrophysiologic recording and drug pharmacology. A working knowledge of the molecular biologic techniques used in expression of channel proteins is desired. (Position #523)

B.S./M.S. Cell Electrophysiologist

Investigate the mechanism action of K channel modulators and study their effects on ion channels in isolated smooth muscle and/or cardiac cells. Requirements include a BS/MS in a biological discipline with experience in cell electrophysiology methods, including whole cell current recordings using the patch clamp technique. A background in performing computerized data acquisition and analysis is essential. (Position #521)

B.S./M.S. Cell Biologist

Primary responsibilities include developing and maintaining cell lines in support of drug screens and developing assays to determine the molecular mechanism(s) of compounds known to modulate vascular smooth muscle cell growth and proliferation. A B.S./M.S. in a biological or biochemical discipline with experience and training in biochemistry and cell biology is required. A background in vascular biology is preferred. Must be familiar with the use of computers in data analysis and acquisition. (Position #621)

B.S./M.S. Molecular Biologist

Join our highly motivated team applying molecular approaches to ongoing drug discovery efforts in atherosclerosis and cardiovascular disease. Requirements include a B.S./M.S. with relevant experience in cDNA synthesis, library construction/ screening, polymerase chain reaction, sequencing, expression, mutagenesis and mammalian cell culture. Experience in RNA analysis, in situ hybridization and signal transduction preferred. (Position # 585)

Wyeth-Ayerst offers an excellent compensation and benefits package in a highly professional environment. Please respond by sending your resume with salary requirements and Position # of interest, to: **Human Resources Department, Wyeth-Ayerst Research, CN 8000, Princeton, NJ 08543-8000.** An Equal Opportunity Employer M/F/D/V.

VISITING ASSISTANT PROFESSORS

The University of Tulsa offers two nine-month, non-tenure-track positions in **Biology** starting August 1993. Responsibilities for one position include teaching environmental biology for majors and non-majors. Responsibilities for the second position include teaching micro-biology for majors and anatomy and physiology for non-majors. Ph.D. in a relevant area and demonstrable teaching experience required. Salary commensurate with experience. Send application letter, curriculum vitae, statement of teaching philosophy, both undergraduate and graduate transcripts, and three letters of recommen-dation to: Dr. Glen Collier, Department of Biological

dation to: Dr. Glen Collier, Department of Biological Science, The University of Tulsa, 600 South College Avenue, Tulsa, OK 74104. FAX: (918) 631-2762. The University of Tulsa is committed to diversifying its faculty and staff: Members of underrepresented groups (includ-ing people of color, people with disabilities, women and veterans) are strongly encouraged to apply. The University of Tulsa is an Equal Employment Oppor-tunity/Affrondiue Action Employment

tunity/Affirmative Action Employer.

ASSISTANT PROFESSOR-RESEARCH **TRACK**: The Department of Animal Biology, School of Veterinary Medicine, seeks a behavioral neurophysiologist to study regulation of REM sleep phenomena. The starting date is July 1994. The candidate must be highly independent with at least 3 years of postdoctoral training and extensive experience in experimental CNS surgery, sleep recording, biostatistics, pharmacologic manipula-tions and must possess good writing skills. Please submit curriculum vitae, statement of research interests, and three letters of recommendation: Sleep Laboratory, Animal Biology—M103E VET/6045, University of Pennsylva-nia, Philadelphia, PA 19104–6045. An Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION IN CANCER BIOLOGY OR CARCINOGENESIS. We are looking for an insight-A state of the sta University of Wisconsin-Madison. The McArdle Laboratory fosters young scientists who are committed to understanding the origins, therapy and prevention of cancer through basic research. Applicants therefore should be interested generally in the mechanisms of carcinogenesis. The depart-ment provides superb animal facilities ideal for investigators who use mouse genetics, gene-knockouts and transgenic animals to study cancer. Members of the department partic-ipate in excellent, well-funded graduate and postgraduate training programs. To be considered, please submit curriculum vitac, publication list, a 2 to 3 page statement of research accomplishments and future objectives, and have 3 qualified individuals send letters of recommendation. Review of the applications will begin on August 1, 1993. Applications and letters of recommendation should be sent to: Faculty Search Committee, McArdle Laboratory for Cancer Research, University of Wisconsin, 1400 University Avenue, Mad-ison, WI 53706. An Equal Opportunity/Affirmative Action Employer. Wisconsin State laws permit public access to names, addresses and occupations of applicants.

FACULTY POSITION ASSOCIATE RESEARCHER

R4, Position number 86062, Hawaii Natural Energy Institute, School of Ocean and Earth Science and Technology, University of Hawaii, 11-month appointment, nology, University of Hawaii, 11-month appointment, temporary, full-time, non-tenure-track position, extra-mural funds, to begin approximately August 16, 1993. **DUTIES**: Conduct research and manage programs in occan technology and environmental systems. Write and prepare technical reports and secure extramural funding. Supervise graduate assistants as needed. **MINIMUM QUALIFICATIONS**: Ph.D. in Oceanography or Ocean Engineering. Five years of experience in academic and industrial research. Proven experience in joint indus-try. government, and academic projects related to Exclutry, government, and academic projects related to Exclu-sive Economic Zone, seabed resource recovery and the ocean environment. ANNUAL SALARY: \$72,972.00. Inquiries: Dr. Patrick Takahashi at (808) 956-8346. To apply, send a statement of research and teaching interests, curriculum vitae and three letters of recommen-dation to: Personnel Officer, Hawaii Natural Energy Institute, University of Hawaii, 2540 Dole Street, Holmes 246, Honolulu, HI 96822. Closing date: July 28, 1993. The University of Hawaii is an Equal Opportunity/

Affirmative Action Institution and encourages women, minorities, handicapped, and veterans to apply.

POSITIONS OPEN

Florida Department of Business Regulation Tallahassee, Florida CHIEF OF LABORATORY SERVICES (POSITION #00514) \$46,500 Annual Salary

The Bureau of Laboratory Services is charged with the detection and identification of drugs in racing animals. The Bureau Chief is responsible for the following: reports laboratory results, renders expert testimony, diabreast of problems and technological advances in racing chemistry, agency administrative rules and Florida Statshould possess a degree in chemistry and have demon-strated ability in lab management, TLC, solid-phase and liquid-liquid extractions, as well as the following instru-mentation: GC, HPLC, IR, and Mass Spectrometry. Benefits include paid health and life insurance.

Submit résumé to: Personnel Office, Northwood Centre, 1940 North Monroe Street, Tallahassee, FL 32399–0796, no later than July 23, 1993. For further information, contact: William E. Tabor, Director of Pari-Mutuel Wagering, Telephone: 904/ 489,0120

488-9130.

Equal Opportunity/Affirmative Action Employer.

MEDICAL DIRECTOR DIRECTOR OF CLINICAL SERVICES

Birmingham—UAB Department of Psychiatry accept-ing applications for position of Medical Director of the UAB Center for Psychiatric Medicine, and Director, Clinical Services. Large, progressive medical center in moder-ate-sized urban area. Faculty rank at level of Associate Professor/Professor, commensurate with qualifications/ riculum vitae and references to: **Robert O. Friedel, M.D.**, Professor and Chairman, Department of Psychiatry, 113 Smolian Building, 1700 7th Avenue South, UAB– UAB Station, Birmingham, AL 35294–0018. Affirmative Action/Equal Opportunity Employer.

SCIENTIFIC DIRECTOR

The National Center for the Study of Wilson's Disease is seeking a physician to be its clinical and research director. Candidates should have a record of productive biochemical research, and an interest in investigating the inherited bio-chemical mechanisms that control the metabolism and interactions of copper, zinc and iron. We are seeking an individual with whom a long-term association is likely to develop. The Center is an affiliate of St. Luke's/

The Center is an affiliate of St. Luke's/ Roosevelt Hospital Center and the College of Physicians and Surgeons of Columbia University at both of which the individual selected will have appropriate academic appointments. Salary will be in the \$50,000 to \$100,000 range, with

health and pension benefits. The Center's physical facility consists of 3000 square feet of dedicated and newly constructed laboratories and offices in St. Luke's/Roosevelt's Antenucci Medical Research Building. Candidates should forward a letter of applica-

tion and curriculum vitae, by August 15, 1993, to: I. Herbert Scheinberg, M.D., National Center for the Study of Wilson's Disease, 432 West 58th Street, New York, NY 10019.

INSTRUCTOR-level faculty position available in the Department of Psychiatry at the University of Maryland at Baltimore. Duties will include animal model research for human neuropsychiatric conditions. Applicant must have M.D. or Ph.D. degree. He/she must have experi-ence in neuropharmacology research, laboratory work, functional and biochemical autoradiography, HPLC analysis, receptor binding techniques, and in situ his-tochemistry. Some ability in statistical analysis of data is important as is some ability in scientific writing. The applicant's bibliography will be considered. Please mail résumés to: Dr. Carol Tamminga, MPRC, P.O. Box 21247, Baltimore, MD 21228. Affirmative Action/ Equal Opportunity Employer.

DIRECTOR/RESEARCH ADMINISTRATION AND EDUCATIONAL PROGRAMS

The Marine Biological Laboratory has an opening for a person responsible for grants and contract administration and direction of educational programs. This position is also responsible for the development of relations with private enterprise. Ph.D. in a scientific discipline highly desirable. Must have held a major administrative desirable. Must have held a major administrative position with at least four years of experience in grant and contract preparation as well as involve-ment in biology education. Must have working knowledge of federal regulations and funding agencies' regulations and an understanding of science education, especially at the graduate and postdoctoral level. Must have record of effective grant submissions and superior written and ver-bal skills. Send curriculum vitae and names of three references to: Susan P. Goux, Human Resources, Marine Biological Laboratory, Woods Hole, MA 02543, by July 23, 1993.

Equal Opportunity/Affirmative Action Employer.

BIOLOGY DEPARTMENT HEAD

Utah State University is reopening its search for a Biology Department Head. The successful candidate must have a Ph.D. in a relevant field, leadership abilities, a record of accomplishment in academic teaching and research, and must be tenurable at the full professor level. This person is expected to provide intellectual and ad-ministrative leadership for 47 faculty with diverse re-search interests in the ecological, organismal, and molecular aspects of biology. The department has major teach-ing responsibilities for 500 undergraduate majors and 80 graduate students. The Department Head will be respon-sible for faculty/staff personnel affairs, budget management, and coordination of research programs with other campus units including the Utah Agricultural Experi-ment Station, Extension Services, Ecology Center, and Biotechnology Center. Candidates must submit curriculum vitae, a statement of career goals, and names, addresses, and telephone numbers of at least three indiaddresses, and relephone numbers of at least three indi-viduals who will serve as references to: Dr. Jon Take-moto, Chair, Search Committee, Department of Bi-ology, Utah State University, Logan, UT 84322-5305. Telephone: (801) 750-1770, FAX: (801) 750-1575. Screening of applicants will begin August 15, 1993, and will continue until a final candidate is identi-fied. Uteb State University: an Afferding Atting Cand fied. Utah State University is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encour-aged to apply.

The Sackler Faculty of Medicine, Tel-Aviv University, seeks candidates for the following TENURE-TRACK TEACHING AND RESEARCH POSITIONS. Applicants should have a Ph.D. and/or M.D. degree and at least two years of postdoctoral research experience.

1. A position in the Department of Physiology and Pharmacology. Preference will be given to candidates with research interest and experience in the areas of neurophysiology/neuropharmacology with emphasis on systemic integration and expertise in modern techniques, such as imaging, molecular biology or advanced electrophysiology.

2. A position in the Department of Human Microbiology. Preference will be given to candidates with research interest and experience in molecular mechanisms of bacterial pathogenesis and molecular genetics of virulence factors

3. A position in the Department of Pathology. Teaching experience in morphological science is essential. Preference will be given to candidates with research interest and experience in various fields of molecular pathology. The Department offers opportunity for col-laborative research with institutes of pathology in seven affiliated hospitals.

Applicants should submit curriculum vitae, a short synopsis of plans for future research and three letters of recommendation. Applications and letters of recommen-dation should be sent by November 1, 1993, addressed to: Dean, Sackler Faculty of Medicine, Tel Aviv Uni-versity, Ramat Aviv 69978, Israel.

Department of Health and Human Services • Public Health Service • National Institutes of Health • National Heart, Lung, and Blood Institute Chief, Pulmonary Branch, Division of Intramural Research

Announcement Number: HL-93-0039

Opening Date: 06/28/93

93 Closing Date: 07/28/93 (All applications must be post-marked by the closing date)

The National Heart, Lung, and Blood Institute is recruiting a Chief for its Pulmonary Branch in the Division of Intramural Research. The Branch chief will be responsible for planning, overseeing and coordinating research into the pathogenesis and treatment of pulmonary disease and, to this end, has the opportunity to appoint senior and junior investigators, post-doctoral fellows, and technical support staff. The successful applicant must be board certified or board eligible in Pulmonary Disease and have led an internationally recognized program in basic and/or clinical research.

This is a Civil Service position in the Senior Executive Service (SES), with base salary from \$92,900 to \$107,300 per year. Physicians may be eligible for a Physicians Comparability Allowance up to \$20,000 per annum. A recruitment bonus of up to 25 percent of base pay may be available to a nonfederal candidate selected for this position, subject to individual approval. A relocation bonus of up to 25 percent may be available to a permanent Federal employee who must relocate to accept this position, subject to individual approval.

Mandatory managerial/executive qualifications include the ability to demonstrate leadership responsibilities in developing program goals; representing the program to outside groups; directing program planning, execution, evaluation; obtaining and allocating fiscal and material resources; and conducting a fair and equitable employment program.

Please submit an Application for Federal Employment (SF-171), Curriculum Vitae, Bibliography and description of research accomplishments to:

Susan Frieswyk, Personnel Management Specialist National Institutes of Health National Heart, Lung, and Blood Institute Building 31, Room 5A28 9000 Rockville Pike Bethesda, Maryland 20892 (301) 496-6477



Public Health Service Commissioned Officers wishing to enter SES must follow the above procedures. Officers interested in performing the duties of the position within the Commissioned Corps may submit a resume to above address.

Applications from women, minorities, handicapped and veterans are strongly encouraged.

Additional information may be obtained from: Martha Vaughan, M.D., Chair, Pulmonary Branch Search Committee on (301) 496-4554.

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

CHAIRPERSON AND UROLOGIST-IN-CHIEF Department of Urology THE NEW YORK HOSPITAL-CORNELL MEDICAL CENTER

The New York Hospital-Cornell Medical Center seeks a distinguished Urologist for appointment as Professor and Chairperson, Department of Urology, Cornell University Medical College, and Urologist-in-Chief, The New York Hospital. For the Chair of this newly created department, candidates must present evidence of experience and accomplishment in teaching, research, clinical services and administration.

Send a current curriculum vitae, which includes a list of publications, to: Erich Windhager, M.D., Chairman, Urology Search Committee, Room F-104, Cornell University Medical College, 1300 York Avenue, New York, NY 10021. EOE/AA/M/F/D/V.

Cornell University Medical College

Division Director Decision And Information Sciences Argonne National Laboratory

Candidates are sought for the position Division Director, Decision and Information Sciences, at Argonne's Illinois facility. Selected individual will develop, provide leadership for, and exercise management control over programs, technical staff, and support personnel. Major programmatic thrusts include Decision and System Sciences (emergency preparedness, decision analysis, technology/cost assessment, energy system modeling); Policy and Economic Analysis (environmental policy analysis, energy economic analysis); and complex information science applications.

Position requires considerable technical knowledge, and recognition in, one or more of these programmatic areas, and at least some knowledge in all. Comprehensive knowledge of methods for establishing and maintaining relationships with sponsor agencies. Comprehensive skills in: attracting, sustaining and maintaining a highly competent interdisciplinary staff; oral and written English-language communication; decision making and innovative problem solving; multi-program administration and new program development.

Ideal candidate will possess a Ph.D. in an engineering field, a physical science, or an applied quantitative science such as decision analysis, operations research, or computer/information science, supplemented by no less than ten years of relevant, demonstrated accomplishment in a technical managerial role. An ongoing record of publication in referred media is preferred.

Applicants should submit their curriculum vitae, the names and addresses of three technical references and a short statement of their professional management philosophy by August 31, 1993 to: Rosalie L. Bottino, Manager



atement of their professional management philosophy by August 31, 1993 to: Rosalie L. Bottino, Manager Employment and Placement, Box DIS-110118-55, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, 1L 60439. Argonne is an equal opportunity/affirmative action employer.

The Department of Biology at Laval University invites applications for a **FACULTY POSITION** for a specialist in marine macroalgae, with interests in the structure and dynamics of algal communities and capable of developing an active research program within an interdisciplinary research team in Marine Ecology. Qualifications: Ph.D. or D.Sc., preferably with postdoctoral experience; working knowledge of French, or ability to acquire it within a year of appointment. Teaching: participation in the teaching of introductory courses in Botany or Ecology, in an annual field course, and in the area of expertise. Rank and salary according to collective agreement. Send applications (with curriculum vitae, and names and addresses of three referees) to: Directeur, Département de biologie, Université Laval, Québec, Canada, G1K 7P4. Deadline: September 15, 1993, or until a suitable candidate is found.

In accordance with the Canadian immigration requirements, preference will be given to Canadian citizens and permanent residents of Canada.

Laval University applies an Equal Opportunities Program.

TENURE-TRACK POSITION IN BACTERIOLOGY

The Department of Plant Pathology and Microbiology invites applications for a tenure-track position in bacteriology from October 1, 1994. The candidate should have expertise in molecular aspects of bacterial physiology and is expected to conduct research in areas related to agriculture. The selected candidate will teach courses (in Hebrew) at the undergraduate and graduate levels in introductory microbiology and physiology of bacteria with emphasis on agricultural aspects. He/she should be able to develop independent research in the above areas, prepare research proposals and guide M.Sc. and Ph.D. students.

Qualifications required: Ph.D. degree, postdoctoral studies, research experience in one or more of the above fields. The candidate's academic rank will be determined according to his/her qualifications. Applications should include curriculum vitae with

Applications should include curriculum vitae with publication list, a statement of teaching and research experience and a two-page description of proposed research activities. Applicants should also arrange to have three letters of recommendation sent on their behalf under separate cover.

Send application material by November 1, 1993, to: Prof. Abraham Sztejnberg, Head, Department of Plant Pathology and Microbiology, Faculty of Agriculture, The Hebrew University of Jerusalem, P.O. Box 12, Rehovot 76100, Israel. Telephone: 972-8-481334.

POSTDOCTORAL SCIENTIFIC RE-SEARCH OPPORTUNITIES IN INDIA. Three- to twelve-month fellowships in India awarded to U.S. citizens in 1993-4. For information, contact: Jeanine Marie Greene, Academy for Educational Development, 1255 23rd Street, NW, Washington, DC 20037.

POSTDOCTORAL POSITIONS—CELLULAR AND MOLECULAR NEUROBIOLOGY: 1 to 2 postdoctoral positions available for researchers interested in any of three projects: (1) cell interactions regulating proliferation and commitment by neuronal precursor cells; (2) role of trophic factors in controlling neuron production and survival; (3) promoter-trap studies of neuron progenitor-specific genes. Lab is focused primarily on approaching these questions using as a model system the olfactory epithelium of outbred/transgenic mice. Requires Ph.D. and experience in cellular and molecular neurobiology. Experience using olfactory epithelium of outbred/transgenic mice as model system desirable. Salary starts \$24,000. The University of Iowa and its associated medical school, hospitals and clinics can present excellent opportunities for couples with dual careers in the health sciences or other academic areas. The position(s) are in lab of **Dr. Anne Calof.** Send letter of interest, curriculum vitae and names and addresses of references to: **Personnel Assistant, Department of Biological Sciences, 138 Biology Building, University of Iowa, Iowa City, IA 52242–1324. The University of Iowa is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

POSITIONS OPEN

POSTDOCTORAL POSITION available to study the molecular mechanisms of immunosuppression by cytomegalovirus (CMV). Objectives include identification of CMV gene products which regulate antigen presentation and immune functions. Training in molecular virology preferred. Send curriculum vitae to: Ann E Campbell, Ph.D., Department of Microbiology and Immunology, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, VA 23501. Telephone: (804) 446-5667; FAX: (804) 624-2255. Affirmative Action/ Equal Opportunity Employer.

POSTDOCTORAL POSITIONS—two available immediately. (1) To study synaptic transmission in the nucleus tractus solitarius in brainstem slices. Slice and/or voltage clamp experience with patch or sharp electrodes is desirable (MCA). (2) To study the role of peptides in blood pressure regulation during hypertension and pregnancy using whole animal preparations, electrophysiology and molecular biology. Experience in any of these desirable (VLB). Send preference, curriculum vitae and three references to: Drs. Michael C. Andresen and Virginia L. Brooks, Department of Physiology, Oregon Health Sciences University, Portland, OR 97201. FAX: (503) 494-4352. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION

Immediate opening for person with doctoral degree to carry out experiments on the integrative mechanisms of circadian locomotor activity. Strong background in cellular neuroscience is desired with knowledge and experience in electrophysiological techniques. Send curriculum vitae and three letters of recommendation (before August 1, 1993) to: Drs. J. A. Whittaker or J. W. Patrickson, Department of Anatomy, Morehouse School of Medicine, 720 Westview Drive, S.W., Atlanta, GA 30310–1495. FAX: (404) 752-8443.

POSTDOCTORAL POSITIONS. Available in Departments of Anatomy, Biochemistry, Molecular and Cellular Biology, Microbiology and Immunology, Pharmacology, and Physiology. Applicants must have a Ph.D. or M.D. degree. Positions available during 1993 and 1994. Closing date: 31 December 1993 or until positions are filled. *Women and minorities are urged to apply.* Send applications to appropriate department head: The University of Arizona, Arizona Health Sciences Center, Tucson, AZ 85724. An Equal Opportunity/Affirmative Action/Title IX/Section 504 Employer.

POSTDOCTORAL POSITION available in an interactive laboratory to study the molecular biology and cell biology of apolipoproteins. Multiple systems and approaches are used to study these important components of plasma lipoproteins including protein biochemistry, immunochemistry, molecular biology, and macrophage/lymphocyte cell biology. Submit curriculum vitae and the names of three references to: Linda K. Curtiss, Ph.D., Department of Immunology, The Scripps Research Institute, La Jolla, CA 92126. The Scripps Research Institute is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS: Two positions are available in the field of the molecular biochemistry of photosynthesis. One researcher will be involved in the production and characterization of mutants in the CPa-1 protein of PS II (see Putnam-Evans and Bricker (1992) *Biochemistry* **31**:11482). The second will examine protein-protein interactions in PS II (see Frankel and Bricker (1992) *Biochemistry* **31**:11059). The positions are initially for one year. Anticipated starting date is September 1, 1993, pending final approval. Interested candidates should forward curriculum vitae to: Dr. Terry M. Bricker, Department of Botany, Louisiana State University; Baton Rouge, LA 70803. Louisiana State University is an Equal Opportunity Employer.

POSTDOCTORAL POSITION: Innovative approaches to study of alcohol and general anesthetics. Exciting interactive laboratory environment combining state-of-the-art electrophysiology and molecular biology in oocyte expression system, PC12 cells, and neuro-hypophysical nerve terminals. Senior-level postdocs appropriate for Instructor rank will also be considered. Submit curriculum vitae and names of references to: Dr. Steven N. Treistman, Department of Pharmacology, 55 Lake Avenue North, University of Massachusetts Medical Center, Worcester, MA 01655.

POSITIONS OPEN

POSTDOCTORAL POSITION available to study the molecular biology of the human interleukin-3 receptor and its associated signal transduction mechanism in factor dependent cell lines and normal hematopoietic cells. Our laboratory is NIH-funded with strong support in core molecular biology functions. Position requires Ph.D. in biochemistry or molecular biology. We offer a very competitive salary, excellent employee benefits and a stimulating work environment. Please submit curriculum vitae and the names/telephone numbers of three references to: R. Allan Mufson, Ph.D., HOLLAND LABD ORATORY, American Red Cross, Department of Cell Biology, 15601 Crabbs Branch Way, Rockville, MD 20855. Equal Employment Opportunity, M/F/H/V.

POSTDOCTORAL POSITIONS IN CHEMOSENSORY RESEARCH

Two postdoctoral positions available. The first is to study human infant behavior and the role of olfaction in mother-infant interaction. The second is to study chemosensory dysfunction in a clinical setting. Send letter of interest, curriculum vitae and names of three references to: Dr. Julie Mennella (position 1) or Dr. Beverly Cowart (position 2), Monell Chemical Senses Center, 3500 Market Street, Philadelphia, PA 19104– 3308. The Monell Chemical Senses Center is an Equal Employment Opportunity/Affirmative Action Employer and encourages applications from women and minorities.

POSTDOCTORAL POSITIONS AVAILABLE IMMEDIATELY to investigate various aspects of calcium regulation in cardiac disease: (1) sarcoplasmic reticulum function in diseased human hearts, including measurement of calcium by electron probe microanalysis, quantitation of transcript and protein levels and subcellular morphometric analysis (Christine Moravec, Ph.D.); (2) cycling of calcium in the hypertrophied heart and its involvement in altered beta adrenergic responsiveness (Meredith Bond, Ph.D.). Applicants should have a Ph.D. and/or M.D. degree, a solid background in muscle physiology and a knowledge of intracellular signalling. Experience in (1) Northern/Western blot techniques, electron microscopy, routine histology/morphometry and (2) myocyte isolation, measurement of intracellular calcium using fura-2, would be useful. The successful applicants will have the opportunity to interact with members of a large department with research programs in cardiovascular physiology and pathology from the molecular to the clinical level. Please send curriculum vitae, the names of three references and a statement of research interests to: (1) Dr. Christine Moravec or (2) Dr. Meredith Bond, Cleveland Clinic Foundation, Department of Cardiovascular Biology, FF 10, 9500 Euclid Avenue, Cleveland, OH 44195. The Cleveland Clinic Foundation is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

The Gladstone Institute of Cardiovascular Disease, University of California, San Francisco. In the labs of:

Robert W. Mahley, M.D., Ph.D.: Study and development of transgenic mouse models of type III hyperlipoproteinemia, will examine effects of expression of apo E mutants on lipid metabolism and atherosclerosis.

Thomas L. Innerarity, Ph.D.: Study the mechanism and physiology of apo B RNA editing and investigate mutations of apo B 100 that disrupt LDL binding to the LDL receptor.

Beatriz Levy-Wilson, Ph.D.: Activation and repression of human apo B transcription in cell culture and transgenic mice. Chromatin structure and nucleosome positioning in regulatory regions.

Candidates should possess a Ph.D. in molecular biology or biochemistry. Competitive salary and benefits. Send curriculum vitae and names of three references to: **Postdoctoral Recruitment; Gladstone Institute of Cardiovascular Disease, UCSF; P.O. Box 419100; San Francisco, CA 94141–9100.** Equal Opportunity Employer.

More than 150,000 people paid to see your ad in *SCIENCE*. Classified Advertising Department telephone: 202-326-6555. FAX: 202-682-0816.

IRCM

Pour que vive la vie! For the Most Out of Life!

Institut de recherches cliniques de Montréal Clinical Research Institute of Montreal

POSITION OF DIRECTOR

The Clinical Research Institute of Montreal (IRCM) is seeking candidates for the position of Director of the Institute. The IRCM is dedicated to basic and clinical biomedical research and is oriented toward the diagnostic, etiologic, and therapeutic aspects of human illness. Affiliated with the Université de Montréal, but under separate administration, the IRCM has nearly 400 persons, including more than 90 researchers, working in 28 laboratories and a Centre for Bioethics. Areas of research vary greatly, from atherosclerosis and hyperlipidemia, biology and molecular genetics, cancer and AIDS, to cardiology, neurochemistry, hypertension, immunology and molecular and clinical pharmacology.

The Director is responsible for scientific direction as well as general administration of the Institute.

The Selection Committee would like to receive applications from interested persons with the following qualifications: a scientist known internationally for the quality of his/her research work, with a good knowledge of French and English, having demonstrated both leadership qualities in a university setting and administrative capabilities. The candidate, preferably a medical doctor, should be convinced of the importance of the relationship between fundamental and clinical aspects of research in the development of research domains and objectives.

The Director will be appointed for a renewable five-year term. Conditions of employment are to be discussed.

Curriculum vitae should be sent before November 1st, 1993, to the Chairman, Selection Committee, IRCM, 110 Pine Avenue West, Montreal, Canada H2W 1R7.

In accordance with Canadian immigration requirements, priority for this position will be given to Canadian citizens and landed immigrants.

Postdoctoral Fellowships

The UNC Lineberger Comprehensive Cancer Center of the University of North Carolina at Chapel Hill will have openings in 1993-94 for persons completing graduate studies to train with excellent investigators in basic research in tumor virology, molecular carcinogenesis, molecular therapeutics, cancer cell biology, genetics, and tumor immunology. Training is available in recombinant DNA technology, gene expression, DNA replication, mutagenesis, regulation of cellular proliferation, growth factors, molecular immunology, molecular genetics of cancer, and combined programs. Unique training resources and core facilities are housed in the NCI-designated UNC Lineberger Comprehensive Cancer Center.

Preceptors are: Steven Bachenheimer, Albert Baldwin, Keith Burridge, Stephen Chaney, David Clemmons, Marila Cordeiro-Stone, Channing Der, H. Shelton Earp, Jeffrey Frelinger, Frank French, Jack Griffith, Stephen Haskill, Geoffrey Haughton, Brian Herman, Clyde Hutchinson III, Eng-Shang Huang, Kenneth Jacobson, Rudolph Juliano, David Kaufman, Shannon Kenney, Ryszard Kole, Steven Leadon, David Lee, Edison Liu, Patricia Maness, William Marzluff, Beverly Mitchell, Howard Ozer, Joseph Pagano, Nancy Raab-Traub, James Raleigh, R. Jude Samulski, Aziz Sancar, Ronald Swanstrom, Ronald Thurman, Jenny Ting, Thea Tisty, Michael Topal, Terry Van Dyke, Jean-Michel Vos, Elizabeth Wilson, Bernard Weissman, and Yue Xiong.

Candidates must be U.S. citizens or permanent residents. Send for brochure listing faculty and apply with curriculum vitae, three letters of recommendation, a statement of research interests and graduate school records to:

> Joseph S. Pagano, M.D. CB# 7295 UNC Lineberger Comprehensive Cancer Center School of Medicine University of North Carolina at Chapel Hill Chapel Hill, NC 27599-7295

UNC's Comprehensive Cancer Center is an Affirmative Action/ Equal Opportunity Employer. Minority applicants are encouraged to identify themselves.



A DYNAMIC MISSION

At The Glaxo Inc. Research Institute, Our Priority Is Progress.

Glaxo Inc., one of the largest pharmaceutical companies in the world, has an established record of developing the highest quality prescription medicines for unmet patient needs. Located in Research Triangle Park, NC, the Glaxo Inc. Research Institute is a premier facility for scientists working in all aspects of discovery and development. Join us today in the following opening.

POSTDOCTORAL FELLOW

The selected individual will perform basic research exploring the role of **p53 in carcinogenesis, cell** cycle check point control, apoptosis, and DNA repair. This individual will also create mouse models utilizing transgenic and ES cell technologies to express normal and mutant forms of p53. These studies will be correlated with ex vivo and in vitro systems currently in use. In addition, this individual will interact with ongoing projects working on the biochemistry of cell cycle control and DNA repair, and will have the opportunity to collaborate with academic groups working on related topics.

Background must include a Ph.D. with experience in molecular genetics. An interest in cell cycle and apoptosis is required.

Our progressive organization offers an attractive compensation and benefits package that features a matching savings plan, an on-site fitness center and much more. Research Triangle Park, NC offers an academically enriched quality of life complete with cultural and recreational advantages. For confidential consideration, send your resume which must include position title and salary history, to: **Human Resources Department, Job #ASC911710, Glaxo Inc., P.O. Box 13398, Research Triangle Park, NC 27709.** (No Phone Calls or Agency Referrals, Please.) An Equal Opportunity Employer M/F/D/V.



The Spectroscopy and Biochemistry Group at Los Alamos National Laboratory seeks **POSTDOCTORAL RESEARCH ASSOCIATES** to synthesize: (1) stable isotope-labeled derivatives of nucleic acids (and their conversion to oligomeric forms); will participate in studies geared toward the stable isotope-labeled DNA and RNA and the use of these derivatives via NMR spectroscopy to elucidate structure and function of various regions of DNA relevant to the Human Genome. (2) Taxol; will be involved in an efficient synthetic route to the carbon framework of the medicinal drug Taxol. A strong background in synthetic chemistry and desire to broaden one's background into other chemistry areas required. Positions commence October 1993 with annual starting salaries between \$39,660 and \$42,860 and a generous and comprehensive benefit package. A Ph.D. completed within the last 3 years or soon to be completed, in Chemistry or related field required. For consideration: submit two copies of curriculum vitae and publication list to: Mary Anne With, MS P290, PD-93-133, Los Alamos National Laboratory, Los Alamos, NM 87545. For technical questions, call Pete Silks at (505) 667-0151. Affirmative Action/Equal Opportunity Employer. Los Alamos National Laboratory is operated by the University of California for the U.S. Department of Energy.

Applications are invited for a **POSTDOCTORAL POSITION** in a new multidisciplinary vascular biology group to study expression of growth factor–sensitive cyclic nucleotide phosphodiesterases in vascular injury and heart failure. Applicants (M.D. and/or Ph.D. or equivalent) must have publications, and experience with tissue culture and molecular biology techniques. Send curriculum vitae with names of 2 to 3 references to the attention of:

> Carolyn J. Smith, Ph.D. Assistant Professor Department of Experimental Pathology Basic Science Building Room 452 New York Medical College Valhalla, NY 10595 Telephone: (914) 993-4677 FAX: (914) 993-4679

POSTDOCTORAL ASSOCIATE Academic Position available immediately to study immunologic injury to bile duct cells and latent CMV in rodent liver. Recent Ph.D. in immunology is desired. Send résumé and three letters of reference to: Harvey L. Sharp, M.D., Department of Pediatrics, Box 279 UMHC, 420 Delaware Street SE, University of Minnesota, Minneapolis, MN 55455. Telephone: (612) 624-1133, FAX: (612) 624-2682. The University of Minnesota is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL/RESEARCH ASSOCIATE HARVARD MEDICAL SCHOOL BETH ISRAEL HOSPITAL

MOLECULAR BIOLOGY OF HUMAN EOSIN-OPHILS. Position available for Ph.D. in molecular biology or protein chemistry/structure to use site-directed mutagenesis to characterize structure-function relationships for granule proteins and enzymes of eosinophils, specifically their roles in tissue damage, inflammation and pathogenesis of allergic/parasitic diseases. Experience in bacterial or mammalian expression systems and/or purification and characterization of recombinant proteins is desirable. Junior faculty-level appointment possible. Send curriculum vitae and reprints of publications to: Dr. Steven J. Ackerman, Department of Medicine, RE219, Beth Israel Hospital, 330 Brookline Avenue, Boston, MA 02215. Arrange for three letters of reference to be sent by FAX: 617-735-3299.

POSTDOCTORAL POSITION T CELL IMMUNOBIOLOGY

Immediate opening in laboratory with focus on basic and/or applied aspects of T cell biology. Projects include regulation of apoptosis during thymic development, T cell costimulatory pathways (especially CD28:B7), manipulation of CD28:B7 axis in transplantation and tumor immunology. Send résumé and names of references to: Dr. Laurence A. Turka, University of Michigan, 1560 MSRB II, 1150 West Medical Center Drive, Ann Arbor, MI 48109–0676.

POSITIONS OPEN

POSTDOCTORAL POSITION-UNIVERSITY OF FLORIDA

Postdoctoral positions are available immediately to collaborate on studies examining the effects of hypoxia on amino acid transport by lung endothelial cells *in vitro*. Work in progress involves isolation and purification of plasma membrane amino acid transport proteins, preparation of reconstituted membrane systems, and measurement of transmembrane amino acid transport. The positions are for one or two years beginning as early as August 1993. Background in membrane biology, transport physiology, and/or reconstitution of membrane systems is desired. Send curriculum vitae and names and telephone/FAX numbers of three references to: Dr. Edward R. Block, Research Service (151), VA Medical Center, Gainesville, FL 32608–1197. FAX: 904 374-6069.

POSTDOCTORAL FELLOW

Applications are invited for a postdoctoral position in reproductive endocrinology to perform research on the synthesis and metabolism of steroidal hormones of reproduction. Candidates should be familiar with contemporary methods of metabolite separation and analysis. Must hold a Ph.D. or equivalent degree. A background in organic chemistry is desired. Salary is commensurate with qualifications and experience. Please send curriculum vitae and the names and addresses of three references to: Dr. Carl Monder, The Population Council, Center for Biomedical Research, 1230 York Avenue, New York, NY 10021.

POSTDOCTORAL RESEARCH POSITION

Available for a recent Ph.D. to study signal transduction and integrin signalling in platelets, with particular emphasis on activation of GPIIb-IIIa. We are seeking an individual who has exhibited scientific creativity, independence and initiative. Experience in biochemistry, signal transduction and/or molecular biology is required. We offer an interactive research environment in a small, growing biopharmaceutical company. Salary will be commensurate with research experience. Send curriculum vitae and names and telephone numbers of three references to: Dr. David Phillips, VP of Research, COR Therapeutics Inc., 256 East Grand Avenue, South San Francisco, CA 94080. Job number R11-93. COR is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS: To study molecular biology, genetics and biochemistry of (i) cytochrome P450 enzymes in insects and (ii) neuroendocrine control of juvenile hormone biosynthesis. Ph.D. in biological or chemical sciences with experience in biochemical or molecular techniques. Applications accepted through July 20, 1993, or until the positions are filled. Send curriculum vitae and names of three references to: Dr. R. Feyereisen, Department of Entomology and Center for Insect Science, University of Arizona, Forbes 410, Tucson, AZ 85721.

The University of Arizona is an Equal Opportunity Employment/Affirmative Action Employer and encourages applications from women and minorities.

POSTDOCTORAL SCIENTIST position available in Seattle, Washington. Duties include conducting research in molecular characterization of RNA viruses of Leishmanial parasites using DNA recombinant, virological, and cell culture techniques. Responsible for preparing scientific manuscripts for publication, presenting progress at scientific meetings, supervising and training staff, and preparing grant proposals. Position is semiindependent and requires a Ph.D. in microbiology, biochemistry or virology. Applicants must have two years of experience in molecular biology research. Salary: \$30,369 per year, forty hours per week, 8:00 a.m. to 5:00 p.m. By August 1, 1993, send curriculum vitae and names and addresses of three references to: Employment Security Department, E&T Division, JOB # 360233, P.O. Box 9046, Olympia, WA 98507–9046.

SCIENCE welcomes placement of line classified ads by FAX. Please include name and telephone number for our confirmation call when transmitting ad to: FAX NUMBER: 202-682-0816

POSITIONS OPEN

RESEARCH ASSOCIATE

The Research Associate position entails research on the structure, function and regulation of adenosine receptors at the pharmacological, biochemical and molecular biological levels. The employee must purify proteins and work with purified receptors and reconstitution systems and study the receptors' function through the tools of second messenger biology, including cyclic AMP assays, receptor G-protein interactions using radioligand binding techniques as well as protein biochemistry approaches. In addition, the position will entail cloning of new receptors at both the cDNA and genomic levels, and studying the genomic structure of the gene in terms of promoter enhancer activity and the construction of mutant receptors through polymerase chain reaction techniques. The applicant must be able to work independently and have the ability to alter directions in the research, as appropriate, on a daily basis. The lab director will determine the overall long-term goals of the project.

as appropriate, on a daily basis. The lab director will determine the overall long-term goals of the project. Educational Requirements: M.D. degree, or Ph.D. in Molecular Biology, Pharmacology or Biochemistry. Hours: 40 per week; 8:00 to 5:00; Salary \$23,250 per year. All applicants must submit a social security number and evidence of U.S. work authorization.

Interested applicants may apply at the nearest Job Service Office, or submit a résumé to: Job Service, 516 North Mangum Street, Durham, NC 27701. Job Order #: NC 3022753 and DOT Code 090.227-010.

RESEARCH SCIENTIST. Neuropathologist, neuroscientist, neuroanatomist with M.D. or Ph.D. and postdoctoral training for a position in Research Series. Will perform diagnostic procedures and research projects as ASSISTANT BRAIN BANK DIRECTOR in highly established laboratory specializing in Alzheimer's disease research. Funded by NIA, NIH grants. Familiarity with microscopic diagnosis, HPLC technology, immunization, hybridoma and ELISA methodology, localization using immunocytochemical methods, radioimmunoassay, Western blot analysis and protein purification and salary consistent with established University of California payscales. Please send curriculum vitae and names of three references by July 31, 1993, to: George Glenner, M.D., Department of Pathology 0612, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093. UCSD is an Equal Opportunity/ Affirmative Action Employer.

WETLAND AND PRELIMINARY STUDIES GROUP COORDINATOR ILLINOIS NATURAL HISTORY SURVEY

The Center for Wildlife Ecology at the Illinois Natural History Survey invites applications for an **ASSISTANT RESEARCH SCIENTIST** position to serve as the Wetland and Preliminary Studies Group Coordinator. The successful candidate will be responsible for coordinating and organizing the Preliminary Studies Group including organizing and tracking projects, developing training material for new employees, updating report formats, reviewing personnel reports, and conducting an annual evaluation of staff. The Coordinator should have the scientific and physical skills necessary to oversee and participate in the collection and analysis of field data for the completion of botanical and zoological studies. At least a Master's in the biological sciences, in wetland ecology or a related field is preferred. To obtain a copy of the position announcement, contact: **Personnel Office**, **Illinois Natural History Survey**, 607 **East Peabody Drive, Champaign, IL 61820. Telephone: (217) 244-**7790, **FAX: (217) 333-4949**. Closing date is August 6, 1993. *Equal Opportunity/Affirmative Action Employer*.



If you, as a MOLECULAR CELL BIOLOGIST, are interested in the post-translational proteolytic processing of plasma membrane or secretory proteins, we have a position for 1 or 2 years. Write: Prof. Giorgio Semenza, Department of Biochemistry, Swiss Federal Institute of Technology, ETH Zentrum, CH 8092 Zürich, Switzerland.

Postdoctoral Positions

The Biodosimetry Group of the Biology and Biotechnology Research Program at the Lawrence Livermore National Laboratory has an expanding effort to investigate the genetic and environmental causes of fetal losses and birth defects. Two postdoctoral openings are available.

Germinal and Embryonic Mutagenesis

To work as part of an interdisciplinary team to investigate the paternal contribution to fetal loss. developmental defects. and genetic health of offspring. Research includes the development of efficient molecular methods for detecting chromosomal and gene abnormalities in germ cells and embryos of mice: and effects of genetic background and exposure to mutagens.

Molecular Epidemiology

To work as part of a collaborative team to conduct research involving development and application of molecular biomarkers for the detection of chromosomal and gene mutations in human sperm. embryos. and offspring. Research will be conducted into genetic and environmental influences on the frequency of mutated sperm and into the parental and developmental origins of genetic defects in spontaneous abortions and dysmophology.

7900

Both positions require a Ph.D. in biological sciences. Experience in genetics. molecular biology. germinal or somatic mutagenesis. fluorescence *in situ* hybridization. and/or cell biology is a major advantage.

For further information contact Dr. Andrew J. Wyrobek. (510) 422-6296. or FAX (510) 422-2282. Interested applicants are invited to send their CVs including references to: Ms. Quincy McClain, Professional Employment Division. Lawrence Livermore National Laboratory. PO Box 5510. L-725. Dept. #A93219BS. Livermore. CA 94551. U.S. citizenship preferred. We are proud to be an Equal Opportunity Employer. M.F.D V.

University of California



National Cancer Institute National Institutes of Health, Public Health Service

CANCER PREVENTION FELLOWSHIP PROGRAM

The Division of Cancer Prevention and Control (DCPC) is accepting applications for the Cancer Prevention Fellowship Program (CPFP). The purpose of this program is to train individuals from a multiplicity of health science disciplines in the field of cancer prevention and control. The program provides for: Master of Public Health training (at accredited university programs); Participation in the DCPC Cancer Prevention and Control Academic Summer Course (open to all physicians and scientists interested in learning the principles and practice of cancer prevention and control); Working at NCI directly with individual preceptors on cancer prevention and control projects; Field assignments in cancer prevention and control programs at other institutions. Funding permitting, as many as ten Fellows will be accepted for up to three years of training, beginning July 1, 1994. Benefits include selected relocation and travel expenses, paid federal holidays, and participatory health insurance.

<u>ELIGIBILITY</u>

M.D., D.D.S., D.O. from a U.S., territorial, or Canadian Medical School. Foreign medical graduates must have current ECFMG/FMGEMS certification and appropriate experience, e.g., one year residency in a training program approved by the Accreditation Council for Graduate Medical Education.

<u>o r</u>

Ph.D., Dr.P.H. or other doctoral degree in a related discipline (epidemiology, biostatistics, and the biomedical, nutritional, public health or behavioral sciences). Foreign education must be comparable to that received in accredited U.S., territorial, or Canadian institutions.

<u>plus</u>

U.S. citizenship or resident alien eligible for citizenship within four years.

For details and application catalog send a postcard or letter with your name and home address to:

Douglas L. Weed, M.D., M.P.H., Ph.D. Director

Cancer Prevention Fellowship Program Division of Cancer Prevention and Control

National Cancer Institute Executive Plaza South, T-41 Bethesda, MD 20892

***Further Inquiries: Mrs. Barbara Redding, (301) 496-8640

DEADLINE FOR RECEIPT OF APPLICATIONS: SEPTEMBER 1, 1993



NIH is an Equal Opportunity Employer

RESEARCH UPDATE

Significant recombinant protein research continues at Cyanamid.

Extraordinary growth at the Agricultural Research Division of American Cyanamid Company has created a broad range of opportunities for talented research scientists. At our state-of-the-art research laboratories, you'll find a commitment to employing advanced biotechnology and the highest quality science in an atmosphere where ideas are encouraged and talent is recognized and rewarded. We currently seek a highly experienced PhD to join us in the following role:

Sr. Research Biochemist/Bioanalytical Chemist

You will be responsible for performing state-of-the-art research supporting the development of analytical methodology for recombinant-protein products. Analytical methods may range from characterization of raw materials and analyses of the bulk drug, to final dosage forms. You will apply your practical and theoretical knowledge of biomolecular separations, which may include HPLC, GC and electrophoresis; method development and validation experience, and thorough understanding of GMP regulations.

We require a PhD in Biochemistry, Bioanalytical Chemistry or Chemistry with several years' industrial experience in a biopharmaceutical or related field, providing support to pharmaceutical and/or protein products. Experience in the isolation, characterization and measurement of proteins, peptides and nucleic acids in biological samples is desired; experience with capillary electrophoresis a strong plus.

In addition to our unique interdisciplinary environment and history of new product innovations, American Cyanamid Company offers a competitive salary and excellent benefits, including a 401K Savings Plan, and a convenient location just one hour from New York City or Philadelphia. We invite you to forward your resume and salary history to: Employment Office, Dept. MH, American Cyanamid Company, Agricultural Research Division, P.O. Box 400, Princeton, NJ 08543-0400. An Equal Opportunity Employer.



TRANSGENIC TECHNOLOGIST

The Ohio State University Biotechnology Program is seeking a qualified individual to manage the transgenic facility and to provide technical guidance to researchers throughout the campus in generating transgenic animals. Candidates for this staff position should have a minimum of two years experience in the field of transgenic mice, and preferably should have an M.S. or Ph.D. Send curriculum vitae and arrange to have letters of reference sent to: Dr. John Oberdick, Transgenic Technologist Search Committee, Ohio State Biotech-nology Center, 206 Rightmire Hall, 1060 Carmack Road, Columbus, OH 43210-1002. Screening of candidates will begin August 15, 1993.

The Ohio State University is an Equal

THE OHIO STATE UNIVERSITY

Opportunity/ Affirmative Action Employer.

A new International Research Centre has a position for

ELECTROPHYSIOLOGIST

The candidate should have PhD and post-doctoral experience. The candidate will be specialized in neuronal electrophysiology preferably with experience in patch-clamp, oocvtes and tissue slices.

The candidate will lead a small group and form one part of a drug discovery team. For this reason, communication skills are important.

The research will be based on the discovery of new leads in neurodegenerative diseases and ageing process treatment.

The position will be based in a new centre in the Paris area (FRANCE).

PARIS AREA Please send a CV, photo and a handwritten letter with **Ref. 250 SCI** to **COMMUNIQUE** 50/54 rue de Silly 92513 BOULOGNE-BILLANCOURT CEDEX FRANCE



The Immune Response Corporation

THE IMMUNE RESPONSE CORPORATION has a postdoctoral position available to study T cell immunoregulation in AutoImmune Disease at our suburban San Diego R&D facility. Experience in cellular immunology and/or molecular biology is desired.

Interested candidates should forward their curriculum vitae to:

> Human Resources The Immune Response Corporation 5935 Darwin Court Carlsbad, CA 92008 Ref: Postdoctoral Fellow

EQUAL OPPORTUNITY EMPLOYER



Saskatchewan Cancer Foundation Saskatoon Cancer Centre Saskatoon, Saskatchewan

CANCER RESEARCH SCIENTIST

The Cancer Research Unit of the Saskatoon Cancer Centre is seeking a research scientist with experience in tumor biology, oncogenes, growth factors, tumor markers or related areas. The Research Unit currently has eight research scientists with interests in various areas such as tumor metastasis, tumor markers, genetic engineering of antibodies and cytokines, anticancer drugs, oncogenes and signal transduction. The Unit is housed in the Saskatoon Cancer Centre which contains over 10,000 ft² of new laboratory space. Initial salary support will be provided, for a period of three years, from a Terry Fox Regional Development Grant from the National Cancer Institute of Canada during which time the candidate will be expected to secure salary support from competitive sources. Successful candidates will also receive an appointment at the University of Saskatchewan at a rank commensurate with their level of experience. Candidates with a Ph.D. or M.D. degree and at least two years of postdoctoral training are encouraged to apply by submitting a curriculum vitae, description of research interests and names of three references to: Dr. S. A. Carlsen, Director of Research, Saskatoon Cancer Centre, 20 Campus Drive, Saskatoon, Saskatchewan, Canada S7N 4H4. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents.

The closing date for the competition is August 31, 1993.

SCIENTIST

Drug Metabolism

SmithKline Beecham Pharmaceuticals, a worldwide leader in pharmaceutical research, is seeking a scientist with a background in Biochemistry to join our Drug Metabolism Department.

The scientist will assist in the design and conduct of *in vitro* drug metabolism studies directed at understanding mechanisms of metabolism of novel therapeutic agents, and the effects of these agents on cytochrome P450 and other drug metabolizing enzymes. The position requires a working knowledge of biochemical techniques used for *in vitro* metabolism studies, quantitative analysis of drugs and metabolites in biological media using HPLC and radioisotopes, and experience with handling and dosing of laboratory animals and obtaining biological samples. This position requires a B.S. or M.S. degree in chemistry or a biological science plus 2-5 years of related work experience.

Located in our state-of-the-art research facility in suburban Philadelphia, near Valley Forge, PA, we offer a challenging, stimulating environment in which to grow and excel, as well a competitive compensation/benefits/relocation package. For confidential consideration, please forward your resume to: SmithKline Beecham Pharmaceuticals, Sr. Employment Administrator, #M084, PO Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/D/V.

> SB SmithKline Beecham Pharmaceuticals Challenging the natural limits.

AMGEN.

Our entrepreneurial environment naturally evolves as a function of our mission: the development of recombinant DNA-based human therapeutics, utilizing the principles of cellular and molecular biology...through rapid product development and innovative commercialization strategies. We currently have an opportunity for the following professional:

Carbohydrate Chemist

Selected candidate will have a proven record of achievement in synthetic carbohydrate chemistry, including expertise in structural analysis by NMR. This individual will work independently and on interdisciplinary projects requiring a knowledge of the involvement of carbohydrates in biochemical processes. Experience in molecular modelling and other areas of organic chemistry as well as analytical techniques preferred. Ph.D. and a minimum of 2 years post-doctoral experience in a related discipline and good communication/ collaboration skills required.

At Amgen, our employees work in an environment that provides the freedom to manage their projects, regulate the quality of work and make decisions to further company goals. And we back this freedom with a compensation and benefit package that reflects the level of our commitment. If you're interested in this position, please submit CV for consideration to: **Amgen** Inc., Staffing, Job Code OA-SC-AV-005, Amgen Center, Thousand Oaks, CA 91320-1789.

We are an Equal Opportunity Employer M/F/D/V.

CONFERENCE

SECOND INTERNATIONAL CONFER-ENCE ON GENE REGULATION/ ONCOGENESIS/AIDS TO BE HELD IN LOUTRAKI, GREECE SEPTEMBER 23-30, 1993

Topics: • Transcription Factors • DNA Binding Proteins • Growth Factors • Oncogenes • Suppressor Genes • Cancer Vaccines • Cellular and Molecular Aspects of HIV

Organizers: S.D. KOTTARIDIS and T.S. PAPAS Meeting Advisors: B.F.C. CLARK, M. ESSEX, L. FRATI, P.J. FISCHINGER, F. WONG-STAAL, and H. zur HAUSEN

The meetings will focus on current research in the area of gene regulation, cancer and AIDS, and present comprehensive lectures by outstanding speakers in their respective subject areas.

There will be opportunities provided for short seminars and poster presentations.

FOR FURTHER INFORMATION AND REGISTRATION CONTACT:

Dr. Steve Kottaridis Hellenic Anti-Cancer Institute, Department of Virology 171 Alexandras Ave. 11532 Athens GREECE Tel: 30-1-6437210 FAX: 30-1-6421022

FOR SCIENTIFIC CORRESPONDENCE CONTACT:

Dr. Takis S. Papas National Cancer Institute Building 469, Room 102 Frederick, MD 21702-1201 U.S.A. Tel: (301) 846-1576 FAX: (301) 846-6164

RESEARCH ASSOCIATE for University in western Oregon to conduct research on molecular mechanisms of genetic recombination and recombinational repair in *Escherichia coli* and its phages; design and make genetic constructs to study recombinational repair *in vivo*; construct mutant bacterial strains; analyze *in vivo* recombination by blot-hybridiation. DNA sequencing, direct radioactivity scanning and electron microscopy; purify recombinational enzymes; study recombination reactions with purified enzymes *in vivo*. Job requires a Ph.D. in Biochemistry/Molecular Biology and experience in bacterial genetics and molecular cloning, DNA sequencing, Southern analysis and and electron microscopy; protein purification; sequence analysis and data graphic analysis using various computer applications. Forty hours per week, \$24,720 per year. Applicant must have legal authority to permanently work in the United States. Send résumé to: Employment Division, Attention: Job Order Number 5550498, 875 Union Street, N.E., Room 201, Salem, OR 97311. The University of Oregon is an Equal Opportunity/Affirmative Action Institution committed to cultural diversity.

Columbia University Department of Rehabilitation Medicine RESEARCH SCIENTIST-M.D. OR PH.D.

Applications are invited from candidates with a broad interest in physiology and pathophysiology, especially of the autonomic nervous system including the control of body temperature and peripheral circulation as well as muscle and/or exercise physiology and the physiology of women. Established laboratory with financial resources for start-up program. Joint appointment with a basic science department possible depending on qualifications. Address applications to: James S. Lieberman, M.D., Chairman, Department of Rehabilitation Medicine, Columbia University, 630 West 168th Street, New York, NY 10032. An Affirmative Action/Equal Opportunity Employer.

MOLECULAR VIROLOGIST POSITION

A one-year associate research scientist position is open to study pseudorabies virus (suid herpesvirus type 1) latency in "single reactor" pigs. At least five years of experience in molecular virology and biochemistry is needed. The experience must encompass molecular biology of eukaryotic cells and viruses, and relevant molecular biology techniques like DNA cloning, sequencing, hybridization and PCR. Experience in herpesvirus latency would be advantageous. The project requires an innovative researcher with relevant experience and primary interests in molecular virology and pathogenesis. Submit curriculum vitae and names of two references as soon as possible to: Dr. Sándor Belák, Department of Virology, National Veterinary Institute, Biomedical Center, Box 585, S-751 23 Uppsala, Sweden. FAX: +46 18 17 45 17. Telephone: +46 18 67 41 35. Email: Ballagi@bmc.uu.se.

MOLECULAR BIOLOGIST. The Department of Hematology/Oncology at Brookdale Hospital, SUNY Science Center at Brooklyn, invites application for a Research Scientist position to join the ongoing research in myclofibrosis. The candidate must have a Ph.D. with experience in molecular biology. Excellent salary. Academic faculty appointment available. Please send curriculum vitae and names of three references to: Jen C. Wang, M.D., Department of Hematology/Oncology, Brookdale Hospital Medical Center, Linden Boulevard at Brookdale Plaza, Brooklyn, NY 11212. Telephone: (718) 240-5807. Equal Opportunity Employer.

NEUROLOGIST/DEVELOPMENTAL NEURO-BIOLOGIST sought by Columbia University, Department of Neurology, to develop basic research program in cortical development and developmental abnormalities related to epilepsy. Applicants must have M.D. degree (some clinical work required) and track record of accomplishment in developmental neurobiology. Preference given to candidates with current grant support. Position is tenure-track with academic rank depending upon qualifications and experience. Send applications to: Dr. Timothy A. Pedley, Director, Columbia Comprehensive Epilepsy Center, The Neurological Institute, 710 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

SOFTWARE ENGINEERS

Roche Imaging Analysis, a division of Roche Biomedical Laboratories, Inc., has the following positions available in Elon College, North Carolina:

NETWORK SYSTEM DEVELOPER—Networking design, implementation and applications development experience required. Client/server database and Windows 3.x/NT development desired.

COMMUNICATIONS SOFTWARE DEVEL-OPER—Intercomputer communications and/or telecommunications development experience and Windows 3.x/NT development required.

These positions require strong "C" and Windows SDK3.x development skills and product development skills in networking, telecommunications, client/server databases, TCP/IP, SUN/UNIX, WindowsNT, imaging applications, multi-platform development, and group product development.

appications, multi-platform development, and group product development. Qualified candidates send current résumé with salary requirements to: Human Resources, ROCHE BIO-MBDICAL LABORATORIES, INC., 430 South Spring Street, Burlington, NC 27215. An Equal Opportunity Employer, M/F/V/D.



Xenometrix, Inc. is accepting applications for scientists at all levels to develop and validate novel and innovative *in vitro* toxicology and molecular information assays. Open positions include **PROJECT LEADERS**, **STAFF SCIENTISTS**, and **POSTDOCTORAL FELLOWS**. All positions require a Ph.D. with a background in Molecular or Cellular Biology. Project Leaders should have 3 to 5 years, and Staff Scientists 1 to 2 years of postdoctoral experience. Expertise in nuclear run-off transcription and quantitative PCR is desirable for some positions. Xenometrix offers competitive salary and benefits including an attractive employee stock option plan. Please send applications to: Human Resources, Box P, Xenometrix, Inc., 2860 Wilderness Place, Suite 150, Boulder, CO 80301.

INTERDISCIPLINARY-RESEARCH WILD-LIFE ECOLOGIST-UNITED STATES DEPART-MENT OF INTERIOR-Bureau of Land Management, Oregon State Office, Portland, Oregon. Duty Station: Pacific Forest and Basic Rangeland Systems Cooperative Research and Technology Unit, Corvallis, Oregon. Bureau of Land Management is seeking an Interdisciplinary Research Wildlife Ecologist, GS-401/ 408/486-13/14 (\$47,920 to \$73,619 per annum) for a four-year TERM appointment. Incumbent will serve as Project Leader of the Wildlife Ecology Research Program in the Cooperative Unit and be a member of the Graduate Faculty at Oregon State University. Contact: Bureau of Land Management, Oregon State Office, Attention: Dianna L. Alfstad, at 503-280-7252, for a copy of the announcement and necessary paperwork. R13-93-21—Opens: June 10, 1993. Closes: July 30, 1993.

An Equal Opportunity/Affirmative Action Employer.

STATE TOXICOLOGIST, (\$622.05 to \$868.53 per week). The Maine Department of Human Services has an immediate vacancy to administer Maine's Environmental Toxicology Program. Candidates must have a ten (10) year combination of education, training, and experience with primary emphasis in Toxicology. POSI-TION IS OPEN UNTIL AUGUST 16, 1993. For more information contact: Dr. Greg Bogdan or Karen Hoague at (207) 287-3960.

POSITIONS WANTED

FACULTY POSITION WANTED: Extensive experience with animal models of HIV infection (primates, rabbits, and Hu-SCID mice). Research program in the pathophysiology of HIV and evaluation of vaccine and antivirals. Experience with molecular biology techniques, histology at light and EM levels, also, cell culture and cell sorting. The researcher has NIH-funded research programs (5 years). Box 34, Science Magazine, 1333 H Street, N.W., Room 814, Washington, DC 20005.

SCIENCE • VOL. 261 • 2 JULY 1993

COMPUTER MARKETPLACE



End Note Enhanced Bibliographic Software

Circle No. 9 on Readers' Service Card

MARKETPLACE



Circle No. 2 on Readers' Service Card





Desperately Seeking Mono/Poly?	
NIM [™] (Neutrophil Isolation Medium) provides single step separation of mono and poly neutrophils from	
human blood. We Deliver Worldwide.	
	1-800-359-3249 FAX 505-473-5637

Circle No. 11 on Readers' Service Card







Simultaneous CD4, CD8 measurements using CD3 cells as the gate criteria. Whole blood was labeled with CD3-PE, CD4-Quantum Red and CD8-FITC in a single tube.

Quantum Red[™] tandem dye provides three color capabilities for virtually all flow cytometers. Simultaneous analysis of multiple cell populations or fluorescence gating is now possible. Quantum Red Offers:

- Lower emissions in PE channel compared to other tandem dyes
- · Less compensation required than in previous generation third color dyes
- · Equivalent brightness when compared to PE
- · Minimal compensation required for two
- color analysis with FITC labels Economical cost

Quantum Red is available conjugated to: • Streptavidin (Sigma Product No. S 3402)

- · Selected CD markers
- Isotype controls

Immuno Chemicals

SIGMA

Sigma Chemical Company, PO Box 14508, St. Louis, MO 63178, USA. Tel. 1-800-325-3010, Fax 1-800-325-5052. In Australia: Tel. 008-800-097, Fax 008-800-096 In Italy: Tel. 1678-27018, Fax (02) 38010737 In Belgium: Tel. 078 11 47 47, Fax 078 11 47 45 In France: Tel. 05 21 14 08, Fax 05 03 10 52 In Germany: Tel. (0130) 5155, Fax (0130) 6490 In Great Britain: Tel. 0800 373731, Fax 0800 378785

Circle No. 8 on Readers' Service Card

- In The Netherlands: Tel. 06 022 47 48, Fax 06 022 47 45
- In Spain: Tel. 900-101376, Fax 91-6619642 In Switzerland: Tel. 081 756 9721, Fax: 081 756 7420

Outside these countries: Tel. 314-771-5750, Fax 314-771-5757

PCR PRIMER SELECTION

... IT'S NOT FOR HUMANS

OLIGO[®] VER. 4.1 FOR PC OLIGO[®] VER. 4.0 FOR MAC

PRIMER ANALYSIS SOFTWARE

SELECTS OPTIMIZED PCR PRIMER PAIRS FROM ANY DNA/RNA SEQUENCE FILES AND ESTABLISHES OPTIMAL PCR EXPERIMENTAL CONDITIONS IN SECONDS.

By hand, you might invest days designing primers which perform less predictably.

OLIGO's multi-functional searches select PCR primers that are:

- Free of dimer, hairpin, homooligomer and sequence repeat structures
- 🖙 Unique
- Highly specific
- Cross-compatible
- within a defined Tm window

OLIGO automatically searches for sequencing primers and hybridization probes. In addition to primer selection, OLIGO calculates:

- Optimal annealing temperature
- PCR product composition
- Tm by nearest neighbor and two other methods
- Extinction coefficients

Whether your platform is PC or Mac, or your files are in GenBank, EMBL or ASCII format, find out why OLIGO is the most powerful primer analysis software program in the world.

Phone or fax us now for a free demo disk, and see why a helping hand from OLIGO makes scientific sense.

"We know that very little of your expertise can be replaced by computer software, but there are some things that OLIGO just does better than humans . . ."



Send demo disk for:

12

North America & Elsewhere: National Biosciences, Inc. 3650 Annapolis Lane Plymouth, MN 55447 U.S.A *Tel:* (800) 747-4362 (612) 550-2012 *Fax:* (800) 369-5118 (612) 550-9625

🗯 File Edit Analyze Search Select

CBP.SEO

I_m

55

Change Wir

DNA Melting Salt and Fo

DNA Ampl

[mil]

The PCR process is covered by U.S. patents owned by Hoffman - La Roche. Macintosh is a registered trademark of Apple Computer, Inc. In Europe: MedProbe

Optimal Annealing Temperature:-

Product length, GC content & Tm: Product Tm - Lower Primer Tm:

Apper Primer: 21-mer, pos. 357, Tm = 50.5 comer Primer: 21-mer, pos. 1100, Tm = 40. Salt & DNA Concentrations (fixed in this

Primers Tm difference:

MedProbe, A.S. Postboks 2640 St. Hanshaugen N-0131 Oslo 1, Norway *Tel:* (47) 22200137 *Fax:* (47) 22200189

Far East: Takara Shuzo Co., Ltd. Seta 3-4-1 Otsu, Shiga, 520-21 Japan Tel: 0775-43-7231 Fax: 0775-43-9254

For information on a 5-1/4" PC circle Reader Service Number 2 For information on a 3-1/2" PC circle Reader Service Number 20 For information on a Macintosh circle Reader Service Number 21