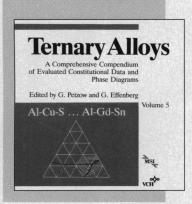
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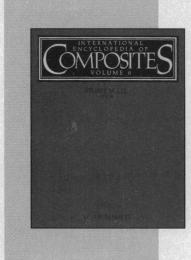
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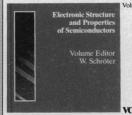
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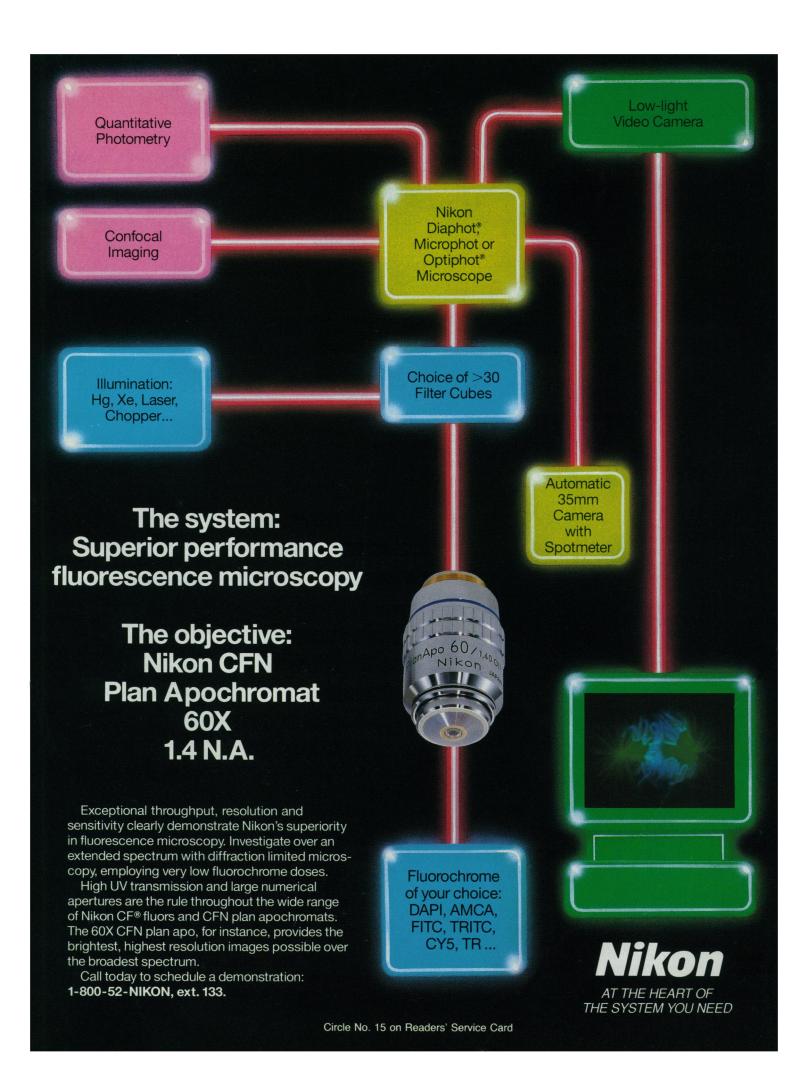
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Products & Materials

Genetic Engineering Program

Vector PC is a software program for genetic engineering work on IBM-compatible computers. The main features are tools for constructing new recombinant molecules, automatic generation of functional and restriction maps of molecules constructed by the user, a database of more than 270 cloning vectors and other recombinant molecules, graphical viewing of molecules' functional and restriction maps, and the ability to import from a variety of databases. InforMax. Circle 91.

Live-Cell Environment for Light Microscopy

The Focht Chamber System (FCS2) for the observation of live cells on a light microscope includes a multi-channel controller that maintains the temperature of a patented indium-tin oxide-



coated microaqueduct slide, chamber frame, and objective heater to within 0.3°C. The system eliminates the need for an air curtain, yet provides high-volume laminar perfusion and low cell surface shear. Bioptechs. Circle 92.

Parallel Spectrometer

Model 250PS Parallel Spectrometer features multiple optical fiber inputs for characterizing emissions from diffuse or heterogeneous light sources, including plasmas, flames, or flows. A charge-coupled device video camera provides imaging and wavelength-resolved detection from the ultraviolet to near infrared spectra. A personal computer acquires data using proprietary software with a frame grabber.

The system processes spectra for all channels and then displays three-dimensional plots. The user controls spectral range and resolution by means of a three-grating turret. Chromex. Circle 93.

Genotyping Software

Bio Image Short Tandem Repeat Polymorphism software can quickly calculate the size of short, repeated DNA sequences used in genetic mapping. These repeated sequences [known as CA repeats, short tandem repeat polymorphisms (STRPs), microsatellites, or simple sequence repeats] are an increasingly popular alternative to restriction fragmentlength polymorphisms for genotyping. STRPs are highly polymorphic, and small amounts can be amplified by polymerase chain reaction. One drawback to STRPs has been the need to manually score alleles to determine their size in base pairs. Scoring alleles by eye is time-consuming and hard to reproduce. The new software eliminates this bottleneck by quickly and objectively scoring alleles. It can increase a researcher's output fivefold, according to the manufacturer. The software runs on all turnkey Bio Image gel-film reader systems and stand-alone SUN Microsystems computers. Millipore. Circle 94.

Confocal Laser Scan Microscope

The LSM 3 confocal laser scan microscope for materials and microelectronics applications breaks new ground in speed, image processing, power, and ease of use. The redesigned system controller has increased image processing and analysis speed. The Windows 3.1 application software gives the user full control of all system

functions with easy-to-use icons and selections. The system can perform high-resolution three-dimensional imaging and optical profiling as well as emission microscopy and infrared imaging. Surface roughness, layer thickness measurements, and topographical imaging are among its capabilities. Carl Zeiss. Circle 95.

GC/FT-IR System

The System 2000 GC/FT-IR combines gas chromatography (GC) and Fourier transform infrared (FT-IR) instruments without compromising the performance of either. The instruments provide a spectrum of each pure component eluted from the gas chromatograph, which allows for identification of each component, even distinguishing structural isomers of the same molecular mass. The system contains a low-volume (< 100 µl) light-pipe system that provides low-nanogram sensitivity. Perkin-Elmer. Circle 96.

Interactive Laser Cytometer

The ACAS 570 Interactive Laser Cytometer comes in five models, each configured for a different set of fluorescence applications: 570C for ultraviolet confocal microscopy, 570K for ratio kinetics, 570I for fluorescence imaging and quantitation, 570T for toxicology screening, and 570S for adherent cell sorting. Features can be mixed and matched and ultraviolet laser excitation is available for any configuration. Features include computerized pinhole alignment; lack of axial or lateral ultraviolet chromatic aberration; user-friendly imaging and quantitation software; and a single integrated computer for controlling the instru-



ment, acquiring data, and building three-dimensional reconstructions. Meridian Instruments. Circle 97.

Literature

ProTeam LC: HPLC for the Life Sciences features methods and instruments for high-performance liquid chromatography (HPLC) of proteins, peptides, amino acids, DNA, RNA, carbohydrates, steroids, vitamins, biogenic amines, and other biomolecules. The 12-page brochure includes chromatograms illustrating analysis and purification by different HPLC separation modes and summarizes the strengths and limitations of the various methods. Isco. Circle 98.

What You Should Know Before Buying a Light-Scattering Instrument for Absolute Macromolecular Characterization is a 20-page booklet that answers many of the most common questions about these instruments and their applications for polymer analysis. It also contains a brief history of light-scattering instruments and a bibliography. Wyatt Technology Corp. Circle 99.

Preparative Biotransformations: Whole Cell and Isolated Enzymes in Organic Synthesis is a looseleaf manual containing information on procedures; practical hints, tips, and instructions; spectral analyses of end products; reviews of methodology; and literature sources. Wiley & Sons. Circle 100.

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.

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POSITIONS OPEN

CANCER MOLECULAR BIOLOGISTS THE USC/KENNETH NORRIS JUNIOR COMPREHENSIVE CANCER CENTER

The University of Southern California, Kenneth Norris Junior Comprehensive Cancer Center is recruiting two tenure-track faculty members, one in the Department of Surgery and one in the Department of Urology with joint appointments in an appropriate basic science department (Microbiology, Biochemistry or Pathology). We are looking for individuals at the ASSISTANT or ASSOCIATE PROFESSOR levels with experience in cell and/or molecular biology and interests in cancer of the gastrointestinal or genito-urinary tracts. These individuals are expected to have a vigorous independent research program and will interact with the tumor biology and gene therapy programs in the Cancer Center. Salaries and start-up funds are highly competitive and space will be available in the new Cancer Center tower which is currently under construction.

Send curriculum vitae, names of three references and summary of research interests to: Dr. Peter A. Jones, USC/Kenneth Norris Jr. Comprehensive Cancer Center, 1441 Eastlake Avenue, #743, Los Angeles, CA 90033. USC is an Affirmative Action/Equal Opportunity Employer.

Department of Anatomy, Southeastern University of the Health Sciences, invites applications for full-time ASSISTANT PROFESSOR, July 1993. Candidate must have Ph.D. and teaching experience. Assist in teaching of Histology to Osteopathic Medicine and Optometry students. Some limited teaching responsibilities in Gross Anatomy and Neuroanatomy.

Curriculum vitae and three references to: Lori B. Dribin, Ph.D., Department of Anatomy, Southeastern University, 1750 N.E. 167th Street, North Miami Beach, FL 33162–3017.

The Division of Allergy/Immunology, UT, Memphis, is seeking an academic full-time ASSISTANT PROFESSOR beginning July 1, 1993. The candidate should be BC/BE in Internal medicine and BC/BE in Allergy/Immunology. Experience with diagnostic laboratory immunology, cellular immunology or molecular technique preferred. The applicant should be well trained and capable of initiating an independent clinical and/or bench research program. Interested applicants please send curriculum vitae and two letters of reference to: Dr. T. J. Yoo, University of Tennessee, Memphis, 956 Court Avenue, Room H300, Memphis, TN 38163. The University of Tennessee is an Equal Employment/Affirmative Action/Title IX/Section 504/ADA Employer.

ASSISTANT PROFESSOR, Department of Education offering primary and secondary certification programs. Ph.D. in a field of science education required. Experience in primary and/or secondary teaching highly desirable. Affirmative Action/Equal Opportunity Employer. Please send letter of application, curriculum vitae, examples of scholarly work and at least three letters of recommendation to: Christine Wilcox, Secretary to the Education Search Committee, Hanover College, P.O. Box 108, Hanover, IN 47243. Position contingent upon approval.

SETON HALL UNIVERSITY CELLULAR/MOLECULAR BIOLOGIST

The Department of Biology, Seton Hall University, invites applications for a possible tenure-track position at the ASSISTANT PROFESSOR level for the fall of 1993. Applicants must have a Ph.D. and relevant post-doctoral experience. The successful candidate will be expected to teach undergraduate cell biology, anatomy and physiology, introductory biology, and relevant graduate classes. Applicants are expected to maintain an active, independent research program. Send curriculum vitae, description of research interests and three references on or before 30 April 1993 to: Chair, Search Committee, Department of Biology, Seton Hall University, 400 South Orange Avenue, South Orange, NJ 07079. For applicants with M.S. and ability to teach above undergraduate courses, send curriculum vitae for possible one-year term appointment.

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR GENE THERAPY IN CANCER

The University of Kentucky/Markey Cancer Center is establishing a gene therapy program in cancer and has opened a search for an M.D. or Ph.D. scientist with expertise in tumor-specific gene transfer/replacement techniques. The successful candidate will have a tenure-track appointment at the Assistant or Associate Professor level in the University of Kentucky College of Medicine. Applicants should include a description of research experience and interests, curriculum vitae and names of three references. The University of Kentucky actively seeks the candidacy of women and minorities. Inquiries should be sent to: Heinz Kohler, M.D., Director of Research, Markey Cancer Center, 800 Rose Street, Lexington, KY 40536–0093.

FACULTY POSITION IN NEURORECEPTOR RESEARCH

The Department of Radiology at the Brigham and Women's Hospital and Harvard Medical School invites applications for the position of ASSISTANT or ASSOCIATE PROFESSOR of Radiology to establish research program in neuroreceptor imaging. Candidates should possess a Ph.D. in neurobiology or related fields, a strong background in neuroreceptor research, ability and interest in collaborating with both basic scientists and clinicians for the development of neuroreceptor imaging agents particularly in the area of Alzheimer's disease and addiction and for radiolabeled tracers which can be applied with SPECT (single photon emission computed tomography). Preference will be given to candidates who have demonstrated research potential and a record for extramural funding. Qualified individuals should submit curriculum vitae, three references and a letter describing research interest and accomplishments to: B. Leonard Holman, M.D., Chairman, Department of Radiology, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115. Brigham and Women's Hospital and Harvard Medical School are Equal Opportunity/Affirmative Action Employers.

PLANT PHYSIOLOGY THE OHIO STATE UNIVERSITY

We seek a Ph.D. plant physiologist for a 9-month, tenure-track position at the ASSISTANT PROFESSOR level. The successful applicant shall develop a modern, externally funded research program. Postdoctoral experience is expected. This position also requires the direction of graduate students, the teaching of an advanced course in the person's specialty, and contributions to the department's lower-division offering. Send curriculum vitae, reprints, statements of research interests and teaching philosophy, and three letters of reference to: Dr. Roger P. Hangarter, Search Committee, Department of Plant Biology, The Ohio State University, 1735 Neil Avenue, Columbus, OH 43210 U.S.A. Review of applications will begin on April 15, 1993, and continue until a suitable candidate is found. The Ohio State University is an Equal Opportunity/Affirmative Action Employer Qualified women, minorities, Vietnam-era Veterans, disabled veterans and the disabled are encouraged to apply.

FACULTY POSITION IN ENVIRONMENTAL SCIENCES

The Division of Environmental Sciences, Columbia University School of Public Health, invites applications for a faculty position at the ASSISTANT PROFESSOR level, available September 1, 1993. Applicants are sought who have a strong commitment to research and teaching. Current strengths in the Division include heavy metal toxicology, molecular carcinogenesis, health physics, environmental and molecular epidemiology. Applications from individuals with research interest in Risk Assessment and/or Toxicology are particularly encouraged. A Ph.D. or M.D. with postdoctoral experience is required. Send a letter, curriculum vitac, research interests, and names of three references to: Joseph Graziano, Ph.D., Division of Environmental Sciences, Columbia University Medical Center, 630 West 168th Street, New York, NY 10032.

Columbia University is an Affirmative Action/Equal Opportunity Employer and welcomes applications from qualified women and minority candidates.

THE AARON DIAMOND FOUNDATION POSTDOCTORAL RESEARCH FELLOWSHIPS

in the Biomedical and Social Sciences

In 1993, The Aaron Diamond Foundation will support 25 postdoctoral research fellowships-to encourage excellence in research addressing the problems of AIDS and drug abuse and to increase the number of biomedical and social scientists working in New York City on these problems. The fellowship program is administered by the New York State Health Research Council, aided by a panel of distinguished scientists comprising the Fellowship Selection Committee.

The fellowship application is co-developed by the potential fellow and a mentor at a New York City institution. A list of nearly 200 established scientists interested in serving as mentors is included in the application materials, although applicants may apply with any qualified New York City scientist.

Support is provided for two years; a third fellowship year may be awarded upon subsequent application. The annual stipend is \$36,000 in the first year; the mentor's institution receives \$30,000 per year to cover costs associated with the fellow's research.

Preference is given to: (1) those with doctoral degrees awarded after 1986 (generally MDs must have completed their residency, while applicants with non-medical degrees may initiate the fellowship immediately after graduation); (2) applicants early in their careers, with three or fewer years of postdoctoral research experience; (3) those who are relocating to New York City; and (4) U.S. citizens or permanent residents. Women and members of minority groups are especially encouraged to apply.

APPLICATION DEADLINE: JULY 30, 1993

FURTHER INFORMATION:

Margaret Brown, Ph.D., Program Director The Aaron Diamond Foundation Postdoctoral Research Fellowship Program 5 Penn Plaza, Room 308 New York, NY 10001 (212) 613-2525

St. Jude Children's Research Hospital Department of Biochemistry

Postdoctoral Fellowships

The Biochemistry Department offers a highly interactive environment for postdoctoral research with a focus on the molecular and cellular biology of signal transduction. The research programs within the Department offer recent Ph.D. or M.D. graduates comprehensive training in a large variety of contemporary molecular and biochemical techniques. Laboratory facilities are housed in a new 220,000 sq. ft. research facility. SICRH offers competitive salaries and fringe benefits. Current research programs within the Department include:

George Cheung: Regulatory properties and biological func-

tions of calmodulin, Ca^{2*}-regulated enzymes and other Ca^{2*}-binding proteins.

John Cleveland: Myc oncogene control of cell cycle progres-

sion, apoptosis and transcription.

James Ihle: Mechanisms of hematopoietic stem cell growth regulation, differentiation and transformation.

Cell cycle regulation of membrane phospholipid biosynthesis. Suzanne Jackowski:

Charles Rock: Role of phospholipid-derived second messen-

gers in growth factor signal transduction.

Robert Rooney: Mechanisms of transcription factor regula-

tion by the E1A oncogene.

Function of wild-type and mutant p53 in Gerard Zambetti:

tumor suppression and oncogenesis.

Applicants should submit a brief statement of research interests, curriculum vitae and the names of three references to:

Biochemistry Departmental Fellowships

The Department of Biochemistry St. Jude Children's Research Hospital 332 North Lauderdale • Memphis, TN 38101 An Equal Opportunity/Affirmative Action Employer



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.

ELIGIBILITY

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.

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.

PLUS

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



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POSITIONS OPEN

PLANT ECOLOGIST VISITING ASSISTANT PROFESSOR

The Department of Biology, University of Michigan, is searching for a plant population/community ecologist to serve as a Visiting Assistant Professor for one year starting September 1993. The successful applicant will one term and an upper-level community ecology course the other term. Interested candidates should send curriculum vitae and the names and telephone numbers of 3 referees to: Dr. E. Werner, Department of Biology, University of Michigan, Ann Arbor, MI 48109—1048. Applications will be reviewed upon receipt and the search will continue until the position is filled.

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

ASSISTANT PROFESSOR OF DEVELOPMENTAL BIOLOGY AND ANATOMY

A full-time, tenure-track faculty position will be available 1 July 1993. Applicants should be capable of establishing an independent research program supported with extramural funds. While the specific area of research with extramural funds. While the specific area of research is open, individuals conducting research in cardiovascular systems or developmental biology and who utilize cell and/or molecular biological approaches are encouraged to apply. The successful candidate will participate in the teaching of medical embryology and gross anatomy to medical students and in interdisciplinary graduate courses to graduate students. Curriculum vitae, representative publications, and the names of three references should be sent to: Dr. Louis Terracio, Departences should be sent to: Dr. Louis Terracio, Department of Developmental Biology and Anatomy, University of South Carolina School of Medicine, Columbia, SC 29208. The University of South Carolina is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR MOLECULAR IMMUNOLOGY, DEVELOPMENTAL GENETICS

The Children's Hospital of Boston and the Department of Genetics of Harvard Medical School have initiated a search for a tenure-track Assistant Professor with research interests in the development or function of the immune system. The appointed candidate will establish a laboratory in proximity to a group that includes Professors Fred Alt, Stuart Orkin, Don Wiley, and Stephen Harrison and will interact with members of the Division of Immunology. The appointee will be expected to establish an important and creative independent research program. Women and minorities are especially encouraged to program. Women and minorities are especially encouraged to apply. Send curriculum vitae, a short summary of research interests, and three letters of recommendation to Dr. Fred Alt, Laboratory of Molecular Medicine, Enders 8, The Children's Hospital, 300 Longwood Avenue, Boston, MA 02115. Deadline for applications is August 1, 1993.

ASSISTANT PROFESSOR of Pharmacology and Toxicology. Non-tenure-track research position to study the pharmacology and biochemistry of the arachidonic acid cascade in brain and cultured brain cells. Ph.D. and 3 years of relevant postdoctoral experience required. Preference given to those with experience in lipid biochemistry who have utilized tissue culture, HPLC and chemistry who have utilized tissue culture, HPLC and GC/MS. Send curriculum vitae and three letters of reference, by May 15, 1993, to: Dr. Earl Ellis, Department of Pharmacology and Toxicology, Box 613, MCV Station, Richmond, VA 23298–0613. Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer and encourages women, minorities and persons with disabilities to apply.

ASSOCIATE DIRECTOR of Vincent Center for Reproductive Biology is sought to manage day-to-day affairs of the Center. Candidate must be an M.D. and/or Ph.D. with advanced training and research accomplishments in Reproductive Biology and assisted reproductive technologies

Salary and medical school faculty appointment com-

mensurate with education and achievements.

Massachusetts General Hospital is an Equal Opportunity

Please send curriculum vitae to: Isaac Schiff, M.D., Chief, Vincent Memorial Gynecology Service, Massachusetts General Hospital, Boston, MA 02114. FAX: (617) 726-7548.

POSITIONS OPEN

ENDOWED CHAIR IN COGNITIVE SCIENCE

The Graduate School of the University of Minnesota seeks applications for the Fesler-Lampert Chair in Cognitive Science—an endowed position with tenure. Candidates should have the Ph.D. or its equivalent, an established record of interdisciplinary research and an active research program in cognitive science (for example, cognitive psychology, cognitive neuroscience, psycholinguistics, artificial intelligence, computational neuroscience, philosophy of cognitive science), and a commitment to graduate-level teaching in cognitive science. The international eminence of the candidate will be an important consideration as will the potential for future high-quality research in cognitive science. Teaching responsibilities are flexible but will include courses that contribute to the research training of graduate students in more than one field of cognitive science. Salary level is highly competitive and depends upon qualifications, experience, and distinction. Candidates should submit curriculum vitae, three representative publications, and a letter of application summarizing future research goals

> Cognitive Science Search Committee Graduate School, Box S32/ 321 Johnston Hall 101 Pleasant Street S.E. University of Minnesota Minneapolis, MN 55455-0421

APPLICATIONS SHOULD BE POSTMARKED NO LATER THAN APRIL 21, 1993.

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

ASSISTANT/ASSOCIATE PROFESSOR MOLECULAR AND CELLULAR BIOLOGIST

The Department of Biochemistry at the University of Rennes, France, invites applications for tenure-track openings at the level of Assistant/Associate Professor. Candidates should hold a Ph.D. or M.D. with 3 to 5 years of postdoctoral training in cellular and molecular biology and have an established record of publication. The successful applicant will establish an independent research program in metabolism, and work in collaboration with an international team of researchers focusing on the study of lipid metabolism.

Please send curriculum vitae, summary of research interests, and names and addresses of 3 references to: **Dr.** Bernard E. Bihain, Chairman, Service de Biochimie, Université de Rennes I, Faculté de Pharmacie, 2 avenue du Prof Léon Bernard, Rennes, 35043, France. Telephone: 33-99-33-69-40; FAX: 33-99-33-68-88).

ACOUISITION EDITOR: International publisher, Raven Press, seeks resourceful, talented individual with advanced degree to identify, evaluate and acquire books and journals in biomedical science. No publishing experience required. Send letter and curriculum vitae to: HR Department, Raven Press, 1185 Sixth Avenue, New York, NY 10036. Equal Opportunity Employer.

DIRECTOR NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH

The Food and Drug Administration (FDA) seeks an outstanding individual to direct its National Center for Toxicological Research (NCTR). The position is in the Senior Executive Service with a salary range of \$92,900 Senior Executive Service with a salary range of \$92,900 to \$111,800 (physicians may be eligible for a comparability allowance up to \$20,000 per year). Candidates may also be eligible for a recruitment or relocation bonus of up to 25% of base pay.

Located in Jefferson, Arkansas, NCTR is a premier research facility charged with conducting basic and applied research that is integral to FDA's regulatory mission in the areas of foods, human and animal drugs, biologics and medical devices.

biologics and medical devices

If interested, please call Jeylene Wood on (301) 443-1755 for information regarding qualification requirements and how to apply for the position. A fact sheet on NCTR is also available upon request. Applications will be accepted until April 23, 1993.

An Equal Opportunity Employer. FDA is Smoke-Free.

POSITIONS OPEN

ASSISTANT PROFESSOR/ ASSOCIATE PROFESSOR PH.D. RESEARCH PHYSIOLOGIST

Division of Pediatric Critical Care Medicine, the University of Texas Southwestern Medical Center at Dallas, Children's Medical Center and Parkland Memorial Hos-

JOB DESCRIPTION: To pursue creative, independent, basic science research in the field of pediatric critical care medicine as the co-director of molecular biology/ physiology research core laboratory. In addition to original, fundable research the investigator would have the opportunity to train fellows and postdoctoral students in pediatric critical care medicine and participate in the full clinical/research educational program within the Division of Pediatric Critical Care Medicine. The University of Texas Southwestern Medical Center is an Equal Opportunity/Affirmative Action Employer.

Applications should be mailed to:

Daniel L. Levin, M.D. Director, Division of Pediatric Critical Care Medicine or
Brett P. Giroir, M.D.
Co-Director, Laborities for Molecular Biology and Physiology Research
Division of Pediatric Critical Care Medicine Children's Medical Center of Dallas 1935 Motor Street
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POSTDOCTORAL TRAINING PROGRAM IN THE CELLULAR/MOLECULAR BIOLOGY OF AGING

Medical College of Pennsylvania

Positions are available for postdoctoral trainees (Ph.D. and/or M.D.) to obtain two years of specialized training in the methods and models of research on aging. This program is directed by a consortium which includes:

- Medical College of Pennsylvania (Drs. V.J. Cristofalo, E. Friedman, P. Phillips and J. Roberts)
- Merck, Sharp and Dohme Research Laboratories (Dr. W.W. Nichols)
- Thomas Jefferson University
- (Dr. R. Baserga) The Wistar Institute
- (Drs. D. Kritchevsky and E. Levine)

Research emphases include:

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• Growth Regulatory Genes • Cellular Transformation
and Immortalization • Regulation of Gene Expression and immortalization ● Regulation of Gene Expression

• Cytogenetics ● Nutrition, Aging and Cancer ● Vascular Cell Physiology ● Cardiovascular Physiology/Pharmacology ● Adrenergic Neurotransmission.

The Medical College of Pennsylvania is an Equal Employ-

rent Opportunity Institution. Minority candidates are especially encouraged to apply. Only those who meet NRSA citizenship requirements are eligible to apply. Address applications (curriculum vitae, three letters of reference and graduate school transcript) to:

Vincent J. Cristofalo, Ph.D. Audrey Meyer Mars Professor and Director Center for Gerontological Research Medical College of Pennsylvania 2900 Queen Lane Philadelphia, PA 19129

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The successful applicant will be expected to give leadership in the teaching and research activities of the Department of Biochemistry which prepares students for the MB, BS and DM degrees of the University of the West Indies and offers courses contributing to an Honours BSc degree. Consultancies are allowed within the University rules.

Salary package, including Entertainment and Housing Allowances, in the range: J\$895,818 - J\$1,094,268 per annum (non medical); J\$999,468 - J\$1,159,548 per annum (medical). Comfortable housing will be provided, if desired, at nominal rentals and other attractive perquisites are offered.

Interested persons are invited to apply to: The University Registrar, Attention: Assistant Registrar (Centre), Office of Administration, the University of the West Indies, Mona, Kingston 7, Jamaica, W.I. {Fax. (809) 927 4869}. Further particulars are available from the same source or from Appointments (41584), Association of Commonwealth Universities, 36 Gordon Square, London WC1H OPF, to whom candidates in the United Kingdom should also send one copy of their application.

Applicants should submit full curriculum vitae and outline their present main field of research and programmes they would wish to pursue at UWI. The names and addresses of three referees should also be included.

Closing date for applications: 30 April 1993.

ASTRONOMICAL MICROWAVE RECEIVER SPECIALIST

The Joint Astronomy Centre (JAC) Hilo, Hawaii has a vacancy for an astronomical microwave receiver specialist to work on the James Clerk Maxwell Telescope (JCMT).

Duties

The successful applicant will be responsible for the performance optimization of the JCMT heterodyne receivers and IF system, commissioning and acceptance testing of new instrumentation. He/she may be required to design and plan enhancements to the instrumentation and supporting infra-structure, or develop new systems.

Qualifications

An appropriate bachelors degree, with knowledge and experience of microwave systems, preferably with application to astronomical research, good communication skills, and the ability to work closely with astronomers and engineering staff. Since the appointee will be required to work at high altitude, it will be a pre-requisite of appointment that a medical examination for work at high altitude be passed and that a trial period be undertaken working at altitude.

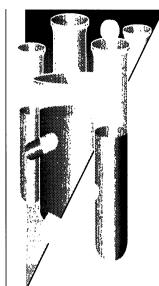
Salary will be commensurate with qualifications and experience and will be reviewed after a 6 month probationary period. The employment package, which is administered through the Research Corporation of the University of Hawaii includes employer contribution towards medical, life insurance and retirement benefits.

To apply send a resume and the names of two referees to:

Administration Officer Joint Astronomy Centre 660 N. A'ohoku Place University Park Hilo, HI 96720

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Postdoctoral Research Associates

The Agricultural Research Service, as the principal scientific research agency of USDA, conducts research to solve technical food and agricultural problems of broad scope and high national priority. The agency's work is carried out under six specific research objectives-conservation of soil, water and air, plant productivity, animal productivity, commodity conversion and delivery, human nutrition and well-being, and integration of systems. Overall aim of ARS research is to ensure the continuation of an adequate supply of food and fiber of high quality to meet the needs of American people and for export.

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Successful candidates will be hired initially for up to 2 years in duration. Salary for these positions \$33,623 to \$40,298 (higher in parts of CA and NY) will be based on qualifications and experience. There are some employment restrictions for non-U.S. citizens.

For written descriptions of positions and application procedures, write to:

J.M. Ruth Personnel Division (SC) USDA/ARS 6305 lvy Lane, Room 129A Greenbelt, MD 20770-1435 or call:

Julie Cypriano (301) 344-0101



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- Ph.D. in neurobiology or related discipline; postdoctoral experience preferred.
 Extensive knowledge of animal surgery, neuroanatomy and neuropharmacology.
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POSITIONS OPEN

TENURE-TRACK FACULTY POSITION AT CARB

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The Center for Advanced Research in Biotechnology (CARB) is seeking an individual for a tenure-track faculty position with a strong interest and a demonstrat-ed ability for creative research in macromolecule structure and function. Excellent applicants working in the broad areas of biochemistry, structural or molecular biology are invited to apply. We are especially seeking a scientist who is interested in the functional behavior of macromolecules in solution with a focus in one of the following general areas: the biochemistry of membrane proteins, signal transduction, mechanistic enzymology, the structure and function of nucleic acids or nucleic acid binding proteins, theoretical or experimental approaches binding proteins, theoretical or experimental approaches to drug design, or peptide chemistry as it applies to a biological problem. The successful candidate will be expected to develop a strong, independent, externally funded research program, and to interact with other CARB scientists involved in macromolecular crystallography, high-field NMR spectroscopy, molecular biology, physical biochemistry, protein folding, stability, modeling and engineering. ing and engineering.

CARB is a research center of the National Institutes of

Standards and Technology (NIST) and the Maryland Biotechnology Institute of the University of Maryland System devoted to fundamental problems of macromolecular structure, function and engineering. Interested candidates should send curriculum vitae, three letters of reference, and a summary of research interests and plans

Faculty Search Committee Center for Advanced Research in Biotechnology 9600 Gudelsky Drive Rockville, MD 20850, U.S.A.

Review of applications will begin 1 June 1993. CARB is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN PHYSIOLOGY AND BIOPHYSICS

Applications are invited for a tenure-track position at the ASSISTANT or ASSOCIATE PROFESSOR level in the Department of Physiology and Biophysics, University of Miami School of Medicine. The Depart-ment has strength in cellular and molecular approaches to the physiology of excitable cells, and we seek an investi-gator with a Ph.D. and/or M.D., degree whose interests and skills will complement this strength. The candidate will be expected to conduct an active, independent, funded research program, and to execute with excellence a limited teaching load in graduate school and medical school neuroscience and physiology courses. Outstanding candidates in all relevant fields are invited to apply, but preference will be given to candidates with molecular biological expertise. Send letter of application, curriculum wires statements of research interests and teaching lum vitae, statements of research interests and teaching experience, and three publications, and arrange to have three letters of recommendation sent by June 1, 1993, to: Dr. Karl L. Magleby, Chairman, Department of Physiology and Biophysics, R-430, University of Miami School of Medicine, Miami, FL 33101-6430.

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POSTDOCTORAL POSITION IMMUNOLOGY

Available July 1, 1993. Ongoing projects include: cellular and molecular analysis of extrathymic T cell development in the intestine; T cell-specific integrins; T cell involvement in arthritis using Tcr gene "knockout" mice. Send curriculum vitae and names of 3 Medicine, Division of Rheumatic Diseases, MC1310, University of Connecticut, 263 Farmington Avenue, Farmington, CT 06030–1310.

HARVARD/POSTDOCTORAL POSITIONS available immediately to study hormonal and developmental control of genes and their function during adipocyte differentiation and lipid biosynthesis. Send curriculum vitae plus 3 references to: Dr. Hei Sook Sul, Department of Nutrition, Harvard School of Public Health, 665 Huntington Avenue, Boston, MA 02115.

POSITIONS OPEN

UNIVERSITY OF YORK PROFESSOR OF PLANT MOLECULAR BIOLOGY/BIOCHEMISTRY

The Biology Department invites applications for a CHAIR in Plant Molecular Biology/Biochemistry from individuals with an outstanding research record in the

The Department offers a vigorous research and teaching environment and is particularly keen to consolidate and enhance its current strengths in Plant Cell Biology, which have been established by Professors Rachel Leech and Dale Sanders in the respective areas of sub-cellular studies of plant development and plant membrane transport/signal transduction.

anticipated that the successful applicant will contribute to the development of research in the area of plant cell biology by establishing an active, externally funded research group with the potential for complementary interactions with existing personnel. Applications from individuals with a research record in plant

molecular biology are particularly encouraged.

Informal inquiries may be made to the Head of the Biology Department (Dr. David White) on 0904 432850.

Salary will be within the professorial range (current minimum £29,949 per annum).

Ten copies of applications (one only from overseas

candidates) including full curriculum vitae and the names of three referees should be sent by 15 May 1993 to: Personnel Office, University of York, Heslington, YORK Y01 5DD, England, from whom further details are available: please quote reference number 4/1041.

YESHIVA UNIVERSITY DEPARTMENT OF BIOLOGY

The small, selective liberal arts colleges of Yeshiva University seek a tenure-track ASSISTANT/ASSOCI-ATE PROFESSOR starting in fall 1993. Teaching load is 12 hours per semester and may include general, developmental, cell and molecular biology and related laboratories. Qualifications: Ph.D., postdoctoral college teaching and research experience, commitment to undergraduate teaching, and the ability to conduct an active, independent research program. Send letter, curriculum vitae, and have three letters of reference sent to: **Prof.** Carl Feit, Biology Search Committee, Yeshiva University, New York, NY 10033. Equal Opportunity Employer.

BOTANIST (SEARCH EXTENDED). Tenure-track position at the ASSISTANT PROFESSOR level to begin August 16, 1993; Ph.D. required. Duties include teaching introductory plant biology, general education (non-majors) biology courses and advanced courses in area of expertise. We are particularly interested to bridge a fold begin and advanced courses in area of expertise. in hiring a field botanist with expertise in ecology. Our department stresses excellence in undergraduate teaching. Active pursuit of grants to support a research program at SIUE involving undergraduate and graduate students is expected. Send curriculum vitae, a statement of teaching and research interest, names and addresses of of teaching and research interest, names and addresses of three references, and a complete grade transcript to:
Botanist Search Committee, Department of Biological Sciences, Box 1651, Southern Illinois University at Edwardsville, Edwardsville, IL 62026–1651. Telephone: (618) 692-3927. Previous applicants will remain under consideration.

Applications will be accepted until April 20, 1993. SIUE is an Affirmative Action/Equal Opportunity Employer.

IMMUNOLOGY FACULTY POSITION

The Department of Pathology, Tufts University School of Medicine, wishes to make a tenure-track appointment. Outstanding candidates, particularly those with a primary interest in gene expression and/or T cell biology, are invited to apply. Applications from both established investigators with a record of research productivity and highly qualified junior investigators will be considered. The appointment will be at a level commensurate with the nominee's experience. Send curriculum vitae and the names of three references to: Search Committee, c/o Dr. Naomi Rosenberg, South Cove 313, Tufts University School of Medicine, 136 Harting Parks March 2011. FAN: (47.25) rison Avenue, Boston, MA 02111. FAX: 617-350-8590. Tufts University is an Equal Opportunity Employer.

Scientific Officer, Arctic Environmental Sciences

The Office of Naval Research is seeking a highly qualified individual to plan and manage a contract research program in the broad field of arctic environmental sciences. The sponsored research is conducted principally at universities and government/industrial laboratories by leading scientists in the field. This is a Civil Service position at the GM-13, 14 or 15 level, (\$47,920 - \$86,589), depending on qualifications.

The individual selected will establish goals for and conceive, organize and direct research and development programs in new areas of arctic environmental sciences including but not limited to dynamics of air-ice-ocean interaction, shelf dynamics, shelf-basin interaction and/or ice acoustic interaction. The incumbent will identify new research opportunities, evaluate and select research proposals for funding, manage funding resources, communicate ONR's interests to the scientific community and represent the program within the Navy and DoD. This position provides the opportunity to have a significant impact on the direction and quality of research in arctic environmental sciences at the national level. Additionally, the opportunity exists to establish or maintain an individual research program at an academic institution or government laboratory.

Applicants must have a Ph.D. or equivalent training in oceanography, or in a physical science area (i.e., physics) related to physical oceanography and at least one year of professional experience OR an equivalent combination of education and experience. To be qualifying, this experience must have been at a level of difficulty and responsibility equivalent to that of the next lower grade level in the Federal Service. In addition, the applicant MUST have knowledge and experience in current state-of-the art research involving oceanography or physics which is evidenced by recent and significant publications in scientific literature. Applicants without this knowledge and experience will not be rated qualified for this position. Demonstrated experience in managing a basic and/or applied research program or project is strongly preferred.

Interested persons should send a resume, list of publications and a Standard Form 171, Application for Federal Employment (available at Federal Job Information Centers or from the address below), to: OFFICE OF NAVAL RESEARCH, SATELLITE HUMAN RESOURCES OFFICE, ONR CODE 01HR1, ATTN: ANNOUNCEMENT #93-05 (SCIENCE), 800 NORTH QUINCY STREET, ARLINGTON, VA 22217-5660.

Applications will be accepted through 3 May 1993 and must be received by that date. Applicants are requested to complete the appropriate supplemental forms. For further information and supplemental forms, please call (703) 696-4705 or (telecommunication device for the deaf) 703-696-2681.

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Applications are invited for POSTDOC-TORAL POSITIONS in the laboratory of Dr. John Kuriyan, whose current research includes structural analysis of tyrosine kinases, cellular receptors and related oncogene products (see Nature, 1992, 358:646). A strong background in protein biochemistry or crystallography is desired. The development of protein expression and purification systems prior to crystallization is emphasized, and candidates with no crystallographic training but with experience in molecular biology, tissue culture, protein biochemistry or site-directed mutagenesis are particularly encouraged to apply. The laboratory is well equipped for crystallography (area detector and mini-supercomputers), molecular biology (PCR, cell culture) and protein purification (FPLC,

Send curriculum vitae to: John Kuriyan, Laboratories of Molecular Biophysics, Box 3, The Rockefeller University, 1230 York Avenue, New York, NY 10021. FAX: 212-327-8618. An Equal Opportunity Employer.

NATIONAL INSTITUTES OF HEALTH MOLECULAR MEMBRANE BIOLOGY

POSTDOCTORAL POSITIONS available for studies in molecular mechanisms of membrane function related to exocrine fluid secretion. Interactive program addresses fundamental problems in Ca²⁺ entry and signaling (I. S. Ambudkar), ion transport (R. J. Turner) and water permeability (B. J. Baum), with novel clinical applications to tissue repair and gene therapeutics. Interest in membrane biology plus experience with fluorescence imaging methods, protein purification/reconstitution, and/or recombinant DNA techniques preferred. Competitive salaries/benefits available. Interested individuals should send curriculum vitae and three reference letters to: Dr. Bruce J. Baum, Clinical Investigations, NIDR, NIH, Building 10, Room 1N-113, Bethesda, MD 20892. NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available at ROCKEFELLER UNIVERSITY to investigate structure-function relationships underlying macromolecular assemblies involved in the processes of transcription and replication. Work in the laboratory involves biochemical, biophysical, and structural investigations of assemblies and sub-assemblies of proteins and nucleic acids isolated at defined stages of the transcription or replication processes. Structural studies include X-ray crystallographic analysis of macromolecules, and electron microscope crystallographic analysis of larger assemblies formed into single-layer thick (two-dimensional) crystals on the surfaces of lipid monolayers. Send curriculum vitae and the names of 3 references to: Dr. Seth A. Darst, The Rockefeller University, Box 89, 1230 York Avenue, New York, NY 10021; FAX: 212-327-7477. An Equal Opportunity/Affirmative Action Employer.

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Two postdoctoral positions are available immediately in an exciting and well-funded laboratory investigating cellular and molecular biology and γδ T cells and their role in autoimmunity. Experience in cell biology, signal transduction and recombinant DNA technology is required for one position. Cellular and molecular immunology experience is required for the second position. Send curriculum vitae and names of three references

to: Dr. Joseph Holoshitz, Director, University of Michigan Specialized Center of Research in Rheuma-toid Arthritis, 200 Zina Pitcher Place, Kresge I R4550, Ann Arbor, MI 48109-0531.

POSTDOCTORAL POSITIONS. Control of cellular growth and differentiation (D. E. Rannels). Regulation of polyamine metabolism or DNA repair (A. E. Pegg). Experience in molecular biology required. Com-Peggi. Experience in inolectual bloogy required. Confidence of Medicine, P.O. Box 850, Hershey, PA 17033. Affirmative Action/Equal Opportunity Employer. Women and minorities encouraged to apply.

POSTDOCTORAL POSITIONS—HARVARD MEDICAL SCHOOL. Fully funded positions are currently available in two project areas: the basic virology and pathogenesis of HIV-1/AIDS; and the development for polylegic development. opment of novel transduction vectors for application to gene therapy. Current work encompasses a multidisciplinary approach taking advantage of ready access to extensive clinical reagents and expertise in addition to the resources of a complete molecular biology lab, including exceptional BL3 level tissue culture facilities. Candidates should have experience in molecular biology or virology. Please send curriculum vitae and references to: Dr. Ernest Terwilliger, New England Deaconess Hospital, CRI-5, 194 Pilgrim Road, Boston, MA 02215.

POSTDOCTORAL POSITIONS IN MOLECULAR BIOLOGY OR GENETICS

Two positions are available to study the molecular biology of steroid hormone metabolizing enzymes, molecular genetic defects in genes, and transengenic mice and embryonic stem cell technology. Experience in molecular biology required. Applicant should send curriculum vitae, statement of research interest and three letters of recommendation to: Dr. Maria I. New, Chairman, Department of Pediatrics.

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this project.
Qualifications include: Ph.D. degree with strong back-Qualifications include: Ph.D. degree with strong back-ground in Molecular Biology/Virology. Please send cur-riculum vitae and three references by May 1, 1993, to: Dr. Roger Maes, Department of Microbiology, Room 178 Giltner Hall, Michigan State University, East Lansing, MI 48824. Affirmative Action/Equal Opportunity Institution.

POSITIONS OPEN

POSTDOCTORAL POSITIONS—IMMUNOL-OGY: Two positions are available to study: (1) molecular mechanisms of cytokine-induced Ig class switch that inechanisms of cytokine-induced ig class switch recombination and (2) the molecular basis of alloreactiv-ity and TCR-MHC interactions. Candidates must be U.S. citizen or permanent resident. Supplementation of NIH stipend depending on expertise. Send letter stating interest, curriculum vitae, and names of three references to: Paul Rothman, M.D., and Ned S. Braunstein, M.D., Department of Medicine and Microbiology, Columbia University, 630 West 168th Street, New York, NY 10032. An Affirmative Action/Equal Opportunity

POSTDOCTORAL POSITION available immediately to work on the biology of early events in human hematopoiesis with particular interest in alterations in-duced by HIV-1. Molecular characterization of cell-cell interactions and tyrosine kinase signalling events empha-sized in a laboratory interactive with basic virology and molecular hematopoiesis laboratories in the Harvard Medical School area. Experience in molecular or cell biology required. Send curriculum vitae to: **David T**. Scadden, M.D., Hematology/Oncology Research, New England Deaconess Hospital, Harvard Medical School, 185 Pilgrim Road, Boston, MA 02215.

POSTDOCTORAL POSITIONS available immediately to work at McGill University in Montreal, performing single-cell recordings to extrastriate visual cortex from awake behaving rhesus monkeys. The research examines questions related to higher-level visual processing including the analysis of optical flow and depth from motion, at both the physiological and psychophysical level.

level.

There is a strong vision community at McGill, including active groups in Psychophysics and Computational Vision. There are also opportunities for interaction with the local behavioural neuroscience community, including Neuropsychology and Brain Imaging.

Experience in single-cell recording and/or visual psychophysics will be given priority. Funding is available in the range of \$22,000 to \$30,000 (U.S.). Please send curriculum vitae and the names of three referees to: Jean-Pierre Roy, Department of Neurology & Neurosurgery, Montreal Neurological Institute (McGill University), 3801 University Street, Montreal, P.Q., Canada, H3A 2B4. Telephone: (514) 398-8056; FAX: (514) 398-8106; Email: roy@xerxes.mni.mcgill.ca

POSTDOCTORAL IN BASIC NEUROSCIENCE

To investigate the function of heme oxygenases and HSP's in neurodegenerative disorders. Experience in biochemistry of the brain and cell culture is essential. Send curriculum vitae and names of three references

Dr. Mahin D. Maines University of Rochester School of Medicine Department of Biophysics Rochester, NY 14642 USA

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POSTDOCTORAL POSITION in Molecular **Neurobiology**. Position available immediately to characterize mammalian K⁺ channel protein complexes. Previous experience in *one* of the following areas is required: purification and/or characterization of membrane proreins, monoclonal antibody techniques, and recombinant DNA methodology. Send curriculum vitae and names of three references to: Dr. J. Trimmer, Department of Biochemistry and Cell Biology, SUNY, Stony Brook, NY 11794–5215. State University of New York at Stony Brook is an Affirmative Action/Equal Opportunity Employer.

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The postdoctoral scientist will play a key role on the interface between molecular biology and protein chemistry. Major responsibilities will be to express and characterize cloned receptors, carry out photoaffinity labeling studies, and purify the labeled proteins for structural characterization, using immunoaffinity techniques.

Candidates should have a background in one of the following main areas, and preferably some additional experience with techniques in the others: gene expression and screening of cells containing mutant receptors, immunochemical methods, membrane protein extraction and purification on small scale, and protein fragmentation and peptide analysis.

If you are interested in joining a team of scientists from a broad range of disciplines in an industrial pharmaceutical research environment, please submit credentials to: Melanie M. Lewis, Human Resources Department, ZENECA Pharmaceuticals Group, Concord Pike and New Murphy Road, Wilmington, DE 19897. An Equal Opportunity Employer M/F.

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Department of Radiology

The New York Hospital-Cornell Medical Center seeks a distinguished Radiologist for appointment as Professor and Chairperson, Department of Radiology, Cornell University Medical College, and Radiologist-in-Chief, The New York Hospital. 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: **Dr. William Ledger, Chairman, Radiology Search Committee, Room F-104, Cornell University Medical College, 1300 York Avenue, New York, New York 10021.** EEO/AA/ M/F/D/V.

The New York Hospital-Cornell Medical Center



CRANIOFACIAL DEVELOPMENTAL BIOLOGY

The Laboratory of Developmental Biology, National Institute of Dental Research, seeks outstanding candidates for both senior (possible tenure-track) or junior level postdoctoral fellowship positions. Considerable opportunity exists for performing independent and collaborative research in a well equipped multidisciplinary department where research is directed to studies in craniofacial devel opmental biology, with emphasis on studying the mechanisms of morphogenesis. Applicants interested in studying neural crest biology, tooth or palate formation, or other aspects of oral or facial development are encouraged to apply. Experience in histological analysis of embryonic craniofacial tissues is strongly preferred. Starting date negotiable. Starting salary will be commensurate with qualifications and experience. Interested applicants should submit a curriculum vitae, description of research interests, and names of at least three references no later than July 15, 1993.

Material should be sent to:

Faye M. Harbrant
Personnel Management Specialist
National Institute of Dental Research
National Institutes of Health
Bldg. 31, Rm. 2C23
9000 Rockville Pike
Bethesda, MD 20892.

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

AUBURN UNIVERSITY

Auburn University, Alabama 36849-5426 Institutional Animal Care and Use Committee

POSITION OPEN DIRECTOR OF ANIMAL RESOURCES AUBURN UNIVERSITY

Auburn University, a comprehensive land-grant university, is seeking a Director of Animal Resources. Major responsibilities include: 1) development and implementation of University-wide policies regarding care and use of all animals (laboratory, farm, wild, and fish) that insure compliance with all state and federal guidelines; 2) development, promotion, and maintenance of a long-term plan for the University's animal research facilities; 3) oversight of daily care and use of all animals used by the University for teaching, research, and extension activities; 4) development and implementation of training programs for animal care personnel, technical staff, and faculty; 5) monitor animal care personnel Occupational Health Program; 6) provide administrative direction to the Institutional Animal Care and Use Committee, working closely with Committee members and central administration in development and implementation of all programs; 7) supervise acquisition of laboratory animals and maintain an accurate inventory of all animals owned by the University; 8) prepare all reports and certifications required by the state and federal agencies; 9) lead the effort to achieve American Association for the Accreditation of Laboratory Animal Care accreditation, a major goal of the University; and 10) attract extramural support for improvement of the animal resource program. The Director will report directly to the Vice President for Research and work closely with deans and directors to implement and promote all animal use policies and procedures. The Director will have direct budgetary responsibility and control of the animal resources program. The Director will supervise an Associate Director for Laboratory Animal Resources and an Associate Director for Farm Animal Resources. Candidates must have a Doctor of Veterinary Medicine/Veterinary Medical Doctor Degree from an American Veterinary Medical Association accredited school or college, with demonstrable expertise in laboratory animal care and management, and experience with

and expertise.

Application deadline is June 15, 1993 or until a suitable candidate is identified. Starting date is October 1, 1993. Send curriculum vitae and names, addresses and telephone numbers of five professional references to: Dr. Keith Cummins, Chairman, Institutional Animal Care and Use Committee, Biological Research Facility, 129 Mell Street, Auburn University, Auburn a 36849. AUBURN UNIVERSITY IS AN EQUAL OPPORTUNITY EMPLOYER. MINORITIES AND WOMEN ARE ENCOURAGED TO APPLY.



SENIOR SCIENTIST

Ph.D MOLECULAR BIOLOGIST

Hoffmann-La Roche has an opportunity for a Ph.D Scientist to join our Preclinical Dermatology Research Group at our research headquarters in Nutley, New Jersey.

This key position focuses on the role of growth factors/cytokines and extracellular matrix components in the repair of photodamaged skin. Techniques to be utilized are PCR-based quantitative measurements of mNRA levels, differential screening of libraries to discover retinoid-responsive genes, and the setting up of *in vitro* models.

The qualified candidate will have a Ph.D in Molecular Biology with post-doctoral experience. Knowledge of a wide of variety of molecular biology techniques, including generation and analysis of cDNA libraries, is also essential.

We offer an attractive salary and a comprehensive benefits package. To apply, send resume and salary history/requirements to: Ms. Joanna Harrington, Staffing Department JH093GB, Hoffmann-La Roche Inc., Nutley, New Jersey 07110-1199. We are an equal opportunity employer.

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- Sr. Scientist (Membrane Technology)
- · Research Scientists

Managers and Group Leaders will have advanced degrees (PhD preferred) in chemistry, biochemistry or life sciences and supervisory experience in the industrial sector. Demonstrated research emphasis in protein chemistry, immunology, clinical chemistry or membrane technology a plus.

To apply, send your CV or resume to: Bio-Rad Laboratories, Attn: Paul Krueger, Dept. 108, 3726 E. Miraloma Blvd., Anaheim, CA 92806. EOE M/F/D/V.



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Gary Miller*, University of Colorado School of Medicine, Denver, CO

Harold L. Moses, Vanderbilt University School of Medicine, Nashville, TN

Sharon B. Murphy, Children's Hospital, Chicago, IL Garth L. Nicolson, UT-M. D. Anderson Cancer Ctr., Houston, TX

G. Barry Pierce, University of Colorado School of Medicine, Denver, CO.

Michael Prystowsky, University of Pennsylvania School of Medicine, Philadelphia, PA

Stewart Sell, University of Texas Medical School, Houston, TX

Saraswati Sukumar, The Salk Institute, La Jolla, CA Frederick Waldman, University of California, San Francisco, CA

Sandra R. Wolman*, Harper Hospital, Detroit, MI Additional Faculty to be Announced

*Member of the Workshop Executive Committee

APPLICATION DEADLINE: APRIL 30, 1993

Further Information: American Association for Cancer Research • Public Ledger Building

620 Chestnut Street • Suite 816 • Philadelphia, PA 19106-3483

Telephone: (215) 440-9300 • FAX: (215) 440-9313

POSITIONS OPEN

POSTDOCTORAL FELLOW

The Immunology Laboratory of the Department of Medical Cell Biology at the Alfred I. duPont Institute seeks two (2) individuals to participate in ongoing research concerning immune response mechanisms involved in autoimmune and infectious diseases. One position is currently open and the second should be available in the fall of 1993. Candidates should possess a Ph.D. in immunology or related field and experience in cellular immunology and/or molecular immunology. Send inquiries to: Dr. Paul T. Fawcett, Director of Immunology Laboratory #7012, Alfred I. duPont Institute, P.O. Box 269, Wilmington, DE 19899.

POSTDOCTORAL FELLOW

Postdoctoral fellow with 1 to 3 years of experience to work on a multidisciplinary project involving lipoproteins/macrophages and lipid peroxidation in women. Molecular biological experience (expression of genes in eukaryotic cells) essential. Experience related to cytokine/growth factors, enzymes involved in lipid peroxidation, antioxidants or in situ hybridization techniques preferred. Position available July 1, 1993. Send résumé and names of two references to: Dr. Sampath Parthasarathy; Department of Gynecology and Obstetrics, Emory University School of Medicine, Thomas K. Glenn Memorial Building; 69 Butler Street, S.E.; Atlanta, GA 30303.

POSTDOCTORAL RESEARCH FELLOWSHIP HARVARD MEDICAL SCHOOL

A fellowship is available to study AIDS pathogenesis and AIDS-related inflammatory diseases. Requirements are a graduate degree (M.D., D.V.M., Ph.D.) and familiarity with mammalian cell culture.

Interested candidates should send curriculum vitae and three references to:

Dr. Douglas J. Ringler Harvard Medical School One Pine Hill Drive Southborough, MA 01772

POSTDOCTORAL POSITION available to study the newly discovered Ca²⁺ mobilizing system based on cyclic ADP-ribose. Ongoing research includes regulation of the cADPR system, characterizations of its metabolic enzymes and synthesis of cADPR analogs. Experience with molecular biology, enzyme purification and/or microinjection desirable. Please send curriculum vitae and reference letters to: Dr. Hon Cheung Lee, Department of Physiology, University of Minnesota, Minneapolis, MN 55455. The University of Minnesota is an Equal Opportunity Educator and Employer.

POSTDOCTORAL FELLOW: Position available immediately for a biochemical pharmacologist/biochemist to work on the role of nitric oxide in cellular and molecular mechanisms of anesthetics. Expertise in neuronal and glial cell culture, radioimmunoassay, radioreceptor assay, HPLC and an interest in neurochemistry is highly desirable. Send application letter, statement of scientific interest and curriculum vitae to: Dr. M. Bansinath, Department of Anesthesiology, 550 First Avenue, New York, NY 10016.

POSTDOCTORAL FELLOWSHIP

Applications are invited for the E.E. Selkurt Postdoctoral Fellowship at the Department of Physiology and Biophysics, Indiana University School of Medicine. We are seeking a promising investigator with a Ph.D. or M.D. degree. Faculty research is focused on cardiovascular and microvascular physiology, lung vascular and airway biology, smooth muscle physiology, excitation/contraction coupling, cell physiology, excitation/membrane transport, and molecular endocrinology. Send applications (including curriculum vitae, a brief outline of the proposed research, and names of two references to: Selkurt Fellowship Committee, Medical Science 374, 635 Barnhill Drive, Indianapolis, IN 46202–5120. Deadline for receipt of applications is May 14, 1993. Indiana University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL/RESEARCH ASSOCIATE POSITIONS

Postdoctoral/Research Associate positions available immediately for study and training in cellular or molecular biology relating to gene expression. Preference will be given to applicants with Ph.D. and prior experience in microscale protein purification or functional analysis of transcription factors. Send applications to: David Stiles, Molecular and Cellular Section, School of Biological Sciences, Lexington, KY 40506. An Equal Opportunity/ Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

Position immediately available to participate in the study of the molecular basis of drug resistance and breast cancer. Candidates should have experience in molecular biology. Qualified individuals are encouraged to apply by sending curriculum vitae and 2 letters of recommendation to: L. J. Goldstein, M.D., c/o Personnel Department, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. Equal Opportunity Employer.

UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES FELLOWSHIP

POSTDOCTORAL/RESEARCH ASSOCIATE—

Two positions available to study transcriptional regulation of genes involved in cardiovascular diseases. Experience in molecular biology or yeast desirable. Competitive salary with benefits. Please send curriculum vitae and three letters of reference to: Dr. Kamal D. Mehta, Department of Biochemistry and Molecular Biology, Slot 516, University of Arkansas for Medical Sciences, 4301 West Markham, Little Rock, AR 72205. FAX: (501) 686-8169.

RESEARCH ASSOCIATE/ POSTDOCTORAL FELLOW

Division of Pulmonary Medicine seeks qualified applicants for a Postdoctoral Research Fellow position. Strong background in signal processing/time series analysis and computer skills necessary. Ph.D. required, Biomedical or Electrical Engineering preferred. Ability to work independently and knowledge of respiratory physiology/monitoring helpful. Faculty appointment and salary up to \$35,000 plus benefits depending on qualifications and experience. Funding guaranteed for 3 years. Send résumé and 3 letters of reference to: Frederick J. Curley, M.D., Pulmonary, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, MA 01655. An Equal Opportunity Employer.

MOLECULAR PATHOLOGY FELLOWSHIP The Johns Hopkins University School of Medicine Department of Pathology

A molecular pathology fellowship position is currently available in the Molecular Oncology Laboratory for research on breast cancer. Applicants should possess an M.D. degree, and one or more years of training in general pathology or have special experience in a relevant scientific discipline. Equal Opportunity Employer/M/F/H. Drug-free and Smoke-free.

Applications should be sent with curriculum vitae to:

Francis P. Kuhajda, M.D.
Department of Pathology
Ross Research Building 512
The Johns Hopkins University School of Medicine
720 Rutland Avenue
Baltimore, MD 21205–2196

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POSITIONS OPEN

TWO RESEARCH POSITIONS—Available to study the biological functions of cytochrome P450 2E1, an enzyme vital to the metabolism of many environmental chemicals. One will use transgenic overexpression and gene targeting approaches and the other will conduct protein purification and metabolism studies. Candidates with strong background in molecular and cell biology or enzymology and protein purification are encouraged to apply. The positions will be at the postdoctoral level; strong candidates without Ph.D. will also be considered. Send curriculum vitae, summary of research experience, and names of three references to: Dr. Chung S. Yang, Professor, Laboratory for Cancer Research, College of Pharmacy, Rutgers University, Piscataway, NJ 08855–0789. FAX: 908-932-5767. Equal Opportunity Employer.

GRADUATE ASSISTANTSHIPS IN BIOLOGY. Three one-year positions are available in an NSF-funded undergraduate science education research program. Attractive stipend and tuition remission, research course credit, and participation in stimulating interdisciplinary faculty groups working on the cutting edge of science education reform at the college level. Write: Dr. Dawn Adams or Dr. Dan Wivagg, Biology Department, Box 97388, Baylor University, Waco, TX 76798–7388 or call (817)755-2911.

POSTDOCTORAL RESEARCH ASSOCIATE

To elucidate mechanisms employed by lignin-degrading fungi for uptake and intracellular metabolism of aromatic compounds. These include a wide variety of environmentally significant xenobiotics, as well as low molecular weight fragments derived from lignin. See PNAS 88:10605 (1991), Appl. Environ. Microbiol. 58: 1832 (1992). Position requires strong background with publication in microbial enzymology/metabolite analysis. Experience in membrane-bound enzymes or metabolite transport is desirable. Position, available September 1993, is funded for two years at a Federal laboratory on the University of Wisconsin–Madison campus. U.S. citizenship required. Send curriculum vitae, names of three references, and representative publications to: Dr. Kenneth E. Hammel, Forest Products Laboratory—USDA, One Gifford Pinchot Drive, Madison, WI 53705. An Equal Opportunity Employer.

POSTDOCTORAL RESEARCH POSITIONS

Two postdoctoral positions are available immediately to study: (i) liver-specific gene expression and hepatocyte proliferation; and (ii) regulation of collagen gene expression by oxidative stress. Requirements include a Ph.D. and previous experience in pertinent aspects of molecular and cell biology. Positions are supported by NIH grants. Send curriculum vitae and names of three references to: Mario Chojkier, University of California, San Diego (111-D), CA 92161; FAX: (619) 552-7452.

Equal Opportunity/Affirmative Action Employer. Minorities are encouraged to apply.

RESEARCH ASSOCIATE position available to undertake studies on PDGF-receptor dimerization and hypoxic injury using microscopic fluorescence spectroscopic techniques. Ph.D. in physics or biophysics with experience in digitized video microscopy, FRAP, confocal microscopy, fluorescence lifetime imaging microscopy and laser tweezers desirable. Salary commensurate with experience. Send curriculum vitae and names of three references to: Dr. Brian Herman; Department of Cell Biology & Anatomy; UNC-CH; CB# 7090, 232 Taylor Hall; Chapel Hill, NC 27599. Equal Employment Opportunity Employer/H/M/F/V.

RESEARCH ASSOCIATE position available immediately to study the molecular basis of cervical cancer. Emphasis is placed on the use of molecular probes to diagnose and understand the viral etiology of these diseases. Experience in molecular biology techniques (e.g., oligonucleotide synthesis, PCR, Southern blotting, and in situ hybridization) desirable. Send curriculum vitae and names of three references to: Dr. Brian Herman; Department of Cell Biology & Anatomy; UNC-CH; CB# 7090, 232 Taylor Hall; Chapel Hill, NC 27599. An Equal Opportunity/Affirmative Action Employer.

SYMPOSIUM

Cell Signal Transduction, Second Messengers and Protein Phosphory-lation in Health and Disease Madrid, Spain July 5-9, 1993 Summer Course, Universidad Complutense

Chair

and Organizer: Dr. Angel Martin Municio

Presidente, Real Academia de Ciencias, Madrid 28004

Location: Real Sitio de El Escorial, Madrid, Spain

Sponsor: Banco Central Hispano

Plenary Speakers:

Nicolas G. Bazan (Louisiana State University School of Medicine, New Orleans, Louisiana) "Phospholipid degradation, second messengers, and activation of cell-signaling genes.

Robert Bell (Duke University Medical Center, Durham, North Carolina) "Regulation of protein phosphorylation by diacylglycerol second messengers in normal and cancerous cells.

Pierre Braquet (Institut Henri Beaufour, Paris, France) "Platelet-activating factor in cell signal transduction."

Edmund H. Fisher (University of Washington School of Medicine, Seattle, Washington) "Tyrosine phosphatases in cell cycle trans-

Lloyd Horrocks (Ohio State University, Columbus, Ohio) "NMDA receptor stimulation and release of arachidonic acid: Mechanisms for the Bazan effect.

Michael Moskovitz (Harvard Medical School, Boston, MA)

"Development of new treatments for migraine based on serotonin receptor-targeted strategies.

Yasutomi Nishizuka (Kobe University School of Medicine, Kobe, Japan) "Hydrolysis of phospholipids and activation of protein kinase C for intracellular signaling."

Dr. Angel Martin Municio, Presidente Information:

Real Academia de Ciencias, Exactas, Fisicas y Naturales

Valverde, 22, Madrid 28004 Spain Phone: (34-1) 521 25 29 or 531 35 29

FAX: (34-1) 532 57 16

CELL BIOLOGIST/ BIOCHEMIST

Upjohn Laboratories has made a long-term commitment to understanding various cardiovascular diseases at the molecular level. Our Cardiovascular Disease Research Unit is seeking a Cell Biologist/ Biochemist to identify & investigate new molecular targets and associated signal transduction and second messenger systems associated with this target.

The selected candidate will be involved in collaborative research with scientists from other disciplines in a team-oriented approach to discovering & exploiting new cardiovascular targets.

A Ph.D. with 2-3 years post-graduate experience is necessary. Applicants should possess a strong background in pharmacology and/or molecular biology and an understanding of the cardiovascular system, especially in the areas of hypertension, arrhythmia and myocardial ischemia. Experience in signal transduction and second messenger systems would be highly desirable.

We offer a highly competitive salary and a state-ofthe-art research environment. Please send your resume to The Upjohn Company, Attn: Corporate Recruiting, Position Code

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PHYSICIST, ZP-1310-IV. The Department of Commerce, National Institute of Standards and Technology (NIST), Materials Science and Engineering Laboratory, Ceramics Division, Materials Microstructural Characterization Group is seeking an experienced physicist to take the lead in planning and conducting research to investigate the microstructure evolution of technologically-important materials as a function of heat-treatment, sintering, chemistry, and other processing factors. This ceramics, metals environment, processing, chemical and inservice treatments on microstructure evolution. This position will involve significant interactions with industrial, academic and government scientists on generic technology development of advanced materials processing and in-service development. Publications in archival journals and presentations for the scientific community will be essential Applicants must show successful completion of a Ph.D. or equivalent experience in an area related to materials science, and must address the following selective factors on a separate sheet of paper:

- 1) Skill with modern SANS and SAXS techniques and the theoretical interpretation of scattering data on ceramics and metals.
- 2) Skill in the experimental design and execution of real-time insitu microstructure SAS measurements on porous materials such as clays, cements, and porous rocks.
- 3) Skill with neutron diffraction NDE of internal strains in composites and complex alloys.
- 4) Skill in relating SAS results to complementary research using electron microscopy, x-ray diffraction, and theoretical models

The position has a starting salary range of \$47,920 to \$73,619 depending upon qualifications and experience. In order to apply to vacancy #NIST/93-0167/KY, please send an Application for Federal Employ ment (SF-171) (rev. 6/88), transcripts or OPM Form 1170/17, supplemental statement addressing selective factors, and proof if claiming veteran's preference by close of business April 16, 1993 to:

> U. S. Department of Commerce National Institute of Standards and Technology Attn: Kathy M. Yarmas, Personnel Division Administration Building, Room A-123
> Gaithersburg, MD 20899

NIST is an Equal Employment/Affirmative Action Employer located in Gaithersburg, MD. U.S. Citizenship is required.



DEPARTMENT OF BIOLOGICAL SCIENCES

A tenure track position, at the level of Assistant Professor, is available in the Department of Biological Sciences at the University of Windsor, effective January 1, 1994. We are seeking an aquatic ecologist or ecotoxicologist with research interests in Great Lakes studies. Duties include the teaching of undergraduate courses in Great Lakes Systems and Great Lakes Field Biology as well as graduate courses in the candidate's area of specialization. The successful applicant will be responsible for coordinating the Great Lakes Studies Co-operative Program in Biological Sciences. This includes liaison with potential Co-op placement employers. Applicants must have a Ph.D. and publications in freshwater aquatic research

The University of Windsor is the home of the Great Lakes Institute for Environmental Research; excellent field and laboratory facilities are available.

The University of Windsor is committed to employment equity and welcomes applications from Aboriginal Peoples, persons with disabilities and members of visible minorities. Applications from women are particularly encouraged. In accordance with Canadian Immigration requirements this advertisement is directed, in the first instance, to Canadian citizens and permanent residents of Canada.

Consideration of applications will commence June 30, 1993. The applicant should send a curriculum vitae and arrange to have letters sent from three referees to:

Dr. M. Petras, Head Department of Biological Sciences University of Windsor Windsor, Ontario, N9B 3PA

BIOMEDICAL RESEARCH

Program Resources, Inc. (PRI) has an immediate need for scientists and postdoctoral fellows in the Biological Carcinogenesis & Development Program at the NCI's Frederick Cancer Research & Development Center in Maryland.

The candidates we seek will participate in research projects involving 2 areas: 1) linkage analyses of inherited human cancers and 2) phylogenetic analyses of natural populations of mammals. PhD w/0-3 years experience in molecular biology or related field.

PRI offers a salary commensurate with credentials and an attractive benefits program. For consideration, please forward CV to Barbara J. Norton-Gill, Technical Recruiter.

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ASM (American Society for Microbiology) May 7 Issue - Deadline: April 20

AAI/CIS (American Association of Immunologists/Clinical Immunology Society)

American Association for Cancer Research May 14 Issue - Deadline: April 27

ASBMB (American Society for Biochemistry and Molecular Biology)

May 28 Issue - Deadline: May 11

International Congress of Virology July 23 Issue - Deadline: July 6

Science Innovation '93

July 30 Issue - Deadline: July 13

International Genetics

August 6 Issue - Deadline: July 20

ACS Fall Meeting

August 13 Issue - Deadline July 27

NIH Research Week

September 17 Issue - Deadline: August 31

American Society of Human Genetics Lab Expo & Conference

October 1 Issue - Deadline: September 14

Biotechnica

October 8 Issue - Deadline: September 21

Human Genome

October 15 Issue - Deadline: September 28 October 22 Issue - Deadline: October 5

Neuroscience

October 29 Issue - Deadline: October 12

Medica '93

MAC

November 5 Issue - Deadline: October 19

Salon du Laboratoire

November 19 Issue - Deadline: November 2

ASCB (American Society for Cell Biology)

December 10 Issue - Deadline: November 22

CALL JANIS CROWLEY AT 212-496-7704

Research Chemist with training or experience in toxicology to join investigator staff of the Inhalation Toxicology Re-search Institute, operated by the Lovelace Biomedical and Environmental Research Institute for the Department of Energy. Doctoral degree or equivalent scientific credentials in Chemistry or related field with postdoctoral experience, preferably including training in toxicology, along with strong publication record. Strong analytical chemistry skills required. Initial assignment will include research on the identification and quantitation of chemical metabolites and the products of their interactions with macromolecules in the body. The successful candidate will be expected to act as both an independent and collaborative investigator in team research efforts, and provide chemical expertise to diverse research projects. The Institute offers a highly interactive, multidisciplinary team environment and an opportunity to work and live in the beautiful Southwest. Please send resume and salary requirements to the Human Resources Unit, Inhalation Toxicology Research Institute, P.O. Box 5890, Albuquerque, New Mexico 87185. Refer to Job #119. AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER.

CHAIR, DEPARTMENT OF EPIDEMIOLOGY THE JOHNS HOPKINS UNIVERSITY SCHOOL OF HYGIENE AND PUBLIC HEALTH

Nominations and applications are invited for the position of Chair, Department of Epidemiology at the Johns Hopkins University School of Hygiene and Public Health. The Department is the oldest department of epidemiology in the world. Its mission is to provide the highest quality education in Epidemiology in both pre- and post-doctoral training programs, to investigate the etiology of disease in human populations, to evaluate the efficacy of new preventive and therapeutic modalities, to develop methodology for applying epidemiology to the formulation of rational policies in public health and clinical medicine, and to serve as a resource for training and research for students and faculty throughout the Johns Hopkins Schools of Public Health, Nursing, and Medicine and the Johns Hopkins Hospital.

The Department has approximately 45 full-time faculty in five programs: Chronic Disease Epidemiology, Clinical Epidemiology, Human Genetics, Infectious Disease Epidemiology and Occupational and Environmental Epidemiology. It has large ongoing research projects in the areas of cardiovascular diseases, cancer, AIDS/HIV, neurologic injuries, women's health and aging. It oversees the multidisciplinary Center for Clinical Trials, the Center for Epidemiology and Public Policy, the Welch Center for Prevention, Epidemiology and Clinical Research, and the Training Center for Public Health Research, located in Hagerstown, Maryland. It has approximately 100 students at the pre-doctoral level and 10 at the post-doctoral level. Candidates for this position should have an outstanding record of academic and research accomplishment, proven administrative abilities, and an interest in working collaboratively with colleagues in the largest school of public health with over 350 full-time faculty and in an excellent School of Medicine. A broad view of epidemiology and the ability to provide dynamic leadership for this very strong department is required.

Nominations, applications and inquiries should be received by June 1993 at the address below:

Dr. Robert Black
Chair, Epidemiology Search Committee
c/o Mrs. Amanda Cline
The Johns Hopkins University School of Hygiene and Public Health
Room 1041
615 N. Wolfe Street
Baltimore, MD 21205-2179

AA/EOE

STRUCTURE BASED DRUG DESIGN

At BioCryst Pharmaceuticals, Inc., we have developed a multidisciplinary approach to the fast and efficient discovery and development of novel small molecular weight pharmaceuticals which act on intra-or- extracellular biological macromolecular targets.

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The successful candidates will have the opportunity to work side by side with a proven drug discovery team in an exciting, stimulating environment and assist in the development of the Company's pharmaceutical discoveries. We offer competitive salaries, excellent benefits, and equity participation.

If you have good interpersonal and communication skills, along with the drive, the enthusiasm and the commitment a growth company requires, send your resume to: Human Resources, CODE: YSB, BioCryst Pharmaceuticals, Inc., 2190 Parkway Lake Drive, Birmingham, AL 35244



Tomorrow's Drugs Through Structure-Based Design



Miles Inc., Pharmaceutical Division, is expanding its research program in osteoporosis and is looking for two individuals for its Bone Metabolism section.

RESEARCH SCIENTISTS OSTEOPOROSIS

The ideal candidate will have a Ph.D. in Cell Biology/Biochemistry with 4 years' experience. Candidates should have a strong background in cytokine biology, ligand receptor interactions, and intracellular signalling pathways. We are looking for scientists who would like to apply their skills in Cell Biology and Biochemistry to the study of bone metabolism. A knowledge of the isolation, culture and characterization of bone cells and their precursors is desirable, but not necessary.

We offer attractive compensation and benefit programs.

Resumes including salary history should be forwarded in confidence to: Miles Inc., Pharmaceutical Division, Dept. AABZ, 400 Morgan Lane, West Haven, CT 06516.

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POSITIONS OPEN

The Biotechnology Patent Examining Group of the Patent and Trademark Office is currently recruiting scientists for positions as PATENT EXAMINERS. Individuals with advanced degrees and/or equivalent experience in the fields of immunology, molecular biology, gene therapy, transgenic animals, animal science, biochemistry, protein engineering and microbiology are urged to send a résumé or SF-171 to the following

> Patent and Trademark Office Office of Personnel
> Box 171 Washington, DC 20231 K. Clark (180)

For further information, call (703) 308-1123. U.S. CITIZENSHIP IS REQUIRED FOR EMPLOYMENT.

BIOLOGY: King College, a selective liberal arts college in the Presbyterian tradition that is evangelical and reformed, is seeking a Biologist, permanent position beginning August 1993. Completion or near completion of Ph.D. in biology required. Teaching responsibilities include mammalian physiology, comparative anatomy, developmental biology, cell biology, and human anatomy and physiology. The successful candidate will be expected to direct undergraduate research. King College is an Equal Opportunity Employer. Send curriculum vitae and statement of teaching and research interests by May 15, 1993, to: Dr. Gregory D. Jordan, Dean of the Faculty, King College, 1350 King College Road, Bristol, TN 37620–2699.

CELL BIOLOGIST: A two-year position will be cell. BIOLOGIST: A two-year position will be available August 1993 to teach introductory and non-majors' courses in the areas of cell biology, genetics, and possibly plant biology. Candidates must have a broad background in cell biology, and demonstrated teaching interest and ability. Send curriculum vitae, three reference letters, and graduate transcripts to: Dr. Glen Wurst, Biology Department, Allegheny College, Meadville, PA 16335. Review of credentials begins April 16, 1993. Equal Opportunity Employer.

ENVIRONMENTAL SPECIALISTS III & IV

Palatka, Florida. These are advanced-level positions for environmental scientists performing lake and wetland ror environmental scientists performing lake and wettand restoration and water quality monitoring projects. Duties include: administration of technical and scientific projects, contract management, sampling network design, data collection and analysis, and report writing. Minimum qualifications for the Environmental Specialist IV (43010095): a bachelor's degree from an

accredited college in an environmental science or related field and five years of professional experience. Preference will be given to individuals with advanced degrees. Minimum salary is \$33,000.

Minimum qualifications for the Environmental Specialist III (43010374): a bachelor's degree from an accredited college in an environmental science or related field and four years of professional experience. Preference will be given to individuals with advanced degrees. Minimum salary is \$27,700.

Send résumé with source of ad to: The St. Johns River Water Management District, Office of Human Resources, P.O. Box 1429, Palatka, FL 32178-1429.

(JMB) Apply by April 16, 1993. Equal Employer Opportunity/Affirmative Action Employer/ VET/PREF. DRUG-FREE WORKPLACE.

SKELETAL HISTOLOGY

The Department of Orthopaedic Surgery is searching for a histomorphometrist to join four other faculty members in our Orthopaedic Research Laboratory. The laboratory is located in the new 60,000 square foot multidisciplinary Cannon Research Center. We seek a doctoral-level person (Ph.D., M.D., or equivalent) to maintain an independent, fundable research program, collaborate with other programs in studies of hard and soft tissues, and participate in the education of resident physicians. This is a hard-money position with funds available to build an active research program in skeletal histology. Please send curriculum vitae, recent publications and names of references to: Pam Buennemeyer, Allied Health Recruiter, Carolinas Medical Center, P.O. Box 32861, Charlotte, NC 28232-2861. Equal Opportunity Employer.

POSITIONS OPEN

ASSISTANT RESEARCH BIOCHEMIST, Step Assistance Research Brockhamst, step 1, full-time, at an annual salary rate of \$41,600, effective May 1, 1993, is being sought to develop analytical systems dependent upon HPLC and GCMS technology for the identification and characterization of lipophilic antioxidants such as the separation of complex mixtures of carotenoids, vitamin A and tocopherols (vitamin E). The appointment requires a Ph.D. and experience with HPLC and GC/MS analysis of tocopherols, lipid perioxides, carotenoids, and retinoids. The successful applicant must be cognizant of theoretical models in LDL oxidation, and must have demonstrated ability to work independently. Interested candidates send complete curriculum vitae and the names and addresses of three references by May 7, 1993, to: Linda Jarvis, 299 Life Science Addition, Division of Cell & Developmental Biology, Department of Molecular & Cell Biology, University of California, Berkeley, CA 94720. An Equal Opportunity/Affirmative Action Employer.

MOLECULAR BIOLOGIST/ MOLECULAR PHARMACOLOGIST

The Ohio State University Comprehensive Cancer Center invites applicants for a RESEARCH SCIEN-TIST position to join the multidisciplinary Developmental Therapeutics Program. The candidate should have a Ph.D. with 2 to 3 years of postdoctoral experience in molecular biology, biochemistry, or molecular pharmacology, and is expected to interact with members of the Cancer Center and to establish an independent research program in cancer pharmacology. Experience in tissue culture and tumor models will be helpful. Initial support sis for three years with attractive start-up funds. The successful candidate is eligible to apply for an adjunct faculty position in an appropriate department. Please send résumé and three reference letters to: **Dr. Ken** neth K. Chan, Chair, Search Committee, OSU Comprehensive Cancer Center, Room 308, 410 West 12th Avenue, Columbus, OH 43210 by May 20, 1993. Telephone: (614) 292-5022 (Elsa). The Ohio State University is an Affirmative Action/Equal Opportunity Employer.

FLUVIAL **GEOMORPHOLOGIST**—Riverine and Wetland Ecosystems Branch, National Ecology Research Center, Fort Collins, Colorado. Position with interdisciplinary team studying responses of riparian vegetation to changes in groundwater or site moisture conditions as a consequence of river streamflow. Design and implement studies that integrate hydrology, fluvial geomorphology, fish and wildlife habitat, and plant ecology. Quantitative background and orientation to simulation modeling. Advanced degree, surface and groundwater modeling and predictive techniques in fluvial geomorphology desirable. Salary GS-11/12. An Equal Opportunity Employer. Contact: Peggy Colby, NERC, 4512 McMurry Avenue, Fort Collins, CO 80525. Telephone: 303-226-9393.

RESEARCH ASSOCIATE MOLECULAR NEURO-ONCOLOGY

Position available immediately to use retroviral vectormediated gene transfer technology to study the role of cell-surface glycosylation in human brain tumorigenesis. Ph.D. in molecular virology or related discipline is required. Salary commensurate with experience. curriculum vitae and three letters of recommendation to: Director, The Chicago Institute for Neurosurgery and Neuroresearch, 428 West Deming Place, Chicago, IL 60614.

RESEARCH SCIENTIST position available April 1993 to perform and supervise in vitro and in vivo testing of neuroreceptor-binding radiotracers. Applicant must have a Ph.D. degree in a neurobiological science, as well as two to five years of experience in performing radio-isotope experiments, small animal surgery, and brain dissection. A master's degree plus five years of increasingly responsible experience may be accepted in lieu of a doctoral degree. Submit curriculum vitae and names of three references to: Dr. Barry Zeeberg, 2300 Eye Street, N.W., Room 662 Ross Hall, Division of Radiopharmaceutical Chemistry, George Washington University, Washington, DC 20037. The George Washington University is an Equal Opportunity Employer.

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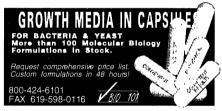
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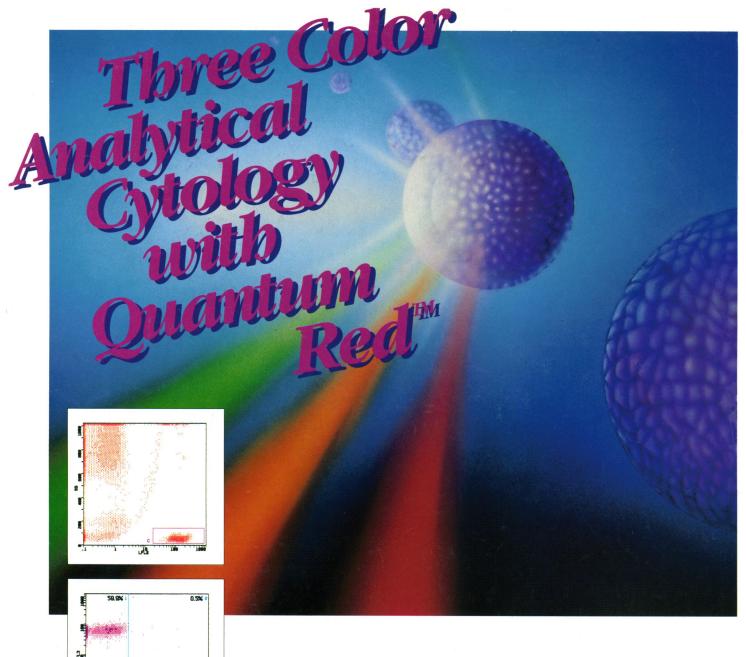
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