This late uplift of Tibet has extremely wide-ranging implications, not only for climatology and biogeography but also for tectonics. In recent years controversy has centered on the role of topography in initiating and sustaining "continental escape," the sideways motion of large chunks of continental lithosphere from loci of intracontinental convergence to avoid excessive thickening of the crust. Data and arguments presented in this book strongly suggest that topography could not have been a major factor in the formation of the present escape system in East and Central Asia. From this point of view, the book is of great importance for geophysicists interested in the behavior of the continental lithosphere. I am surprised that none of the authors even touches upon this subject.

Another interesting aspect of the geological papers is the correlation of deepsea data on Quaternary climatic changes with those from the loess deposits in China and the Quaternary landforms. The correlation of events between the deep-sea cores and the loess sections was initiated by Liu and his associates both in China and abroad and shows that there is a rather precise match between the two. Such a good match cannot be obtained from a study of the landforms. A. J. Brimicombe points out that in studying the Hong Kong landscape three cycles at most of Pleistocene deposition and erosion need be considered to arrive at a satisfactory evolutionary hypothesis. He also points out that the thresholding and resisting nature of landforms makes them less useful as guides to past climatic changes.

Important data and discussions are included in papers on Quaternary changes in sea level along the east coast of China. The general opinion seems to be that the steady sea level of the past 6000 years satisfactorily explains the observed strand displacements.

As a lay person, I read the paleoanthropology section with much pleasure and benefit. The reports of the emergence of a unique and independent Chinese culture as early as the Paleolithic period are fascinating, and there is impressive documentation that the culture continued to develop without serious interruption to the late Neolithic. Also, data show that the evolution from Homo erectus to the present Mongoliform morphology was continuous in China, where cultural evolution involved no Mesolithic period. The 5000 Neolithic sites found in China appear to have considerably expanded our knowledge beyond the Yangshao and Longshan cultures. There seems to be little doubt that Chinese archeology will significantly alter our views of the prehistory of the Old World.

The Evolution of the East Asian Environment is an indispensable component of the working library of any scientist who is interested in the evolution of the physical environment and the biota of East Asia during the late Cenozoic. The book discusses such diverse topics as dentition-food relationships, the environment of the hominid evolution in East Africa, and the usefulness and limitation of pollen analysis, and it contains data that are important for our understanding of the behavior of the continental lithosphere, the nature of controls on atmospheric circulation in general, and the emergence of humans. The book is meticulously edited and handsomely produced. It has independent indexes for subjects, marine organisms, plant names, vertebrate fauna, place names in the People's Republic of China, and geographical names outside China that greatly facilitate its use as a reference.

Publication of a regular newsletter entitled The East Asian Tertiary/Quaternary Newsletter was begun after the conference to facilitate continued exchanges of information. It may be subscribed to for \$6.50 a year including postage for surface mail by writing to the Publications Secretary, Centre of Asian Studies, University of Hong Kong, Pokfulam Road, Hong Kong.

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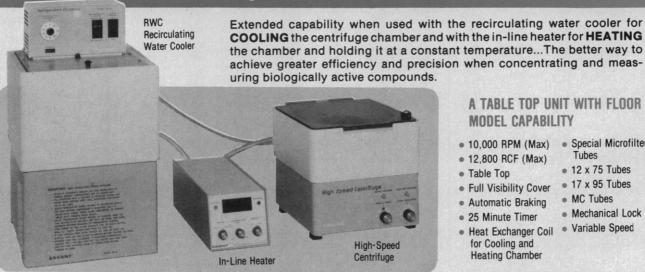
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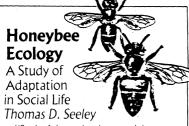
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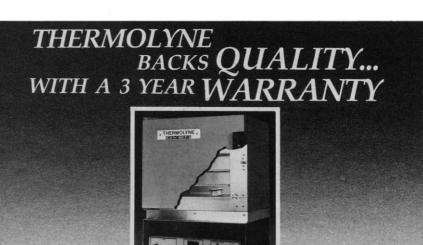
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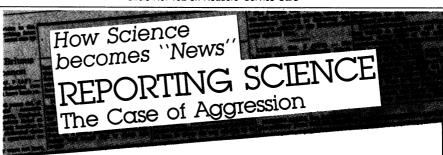
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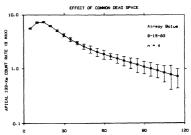
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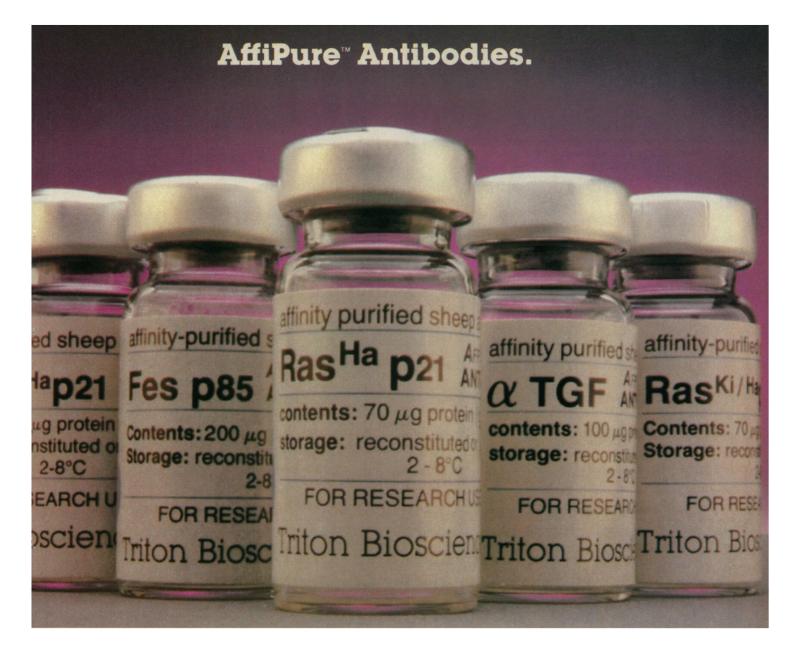
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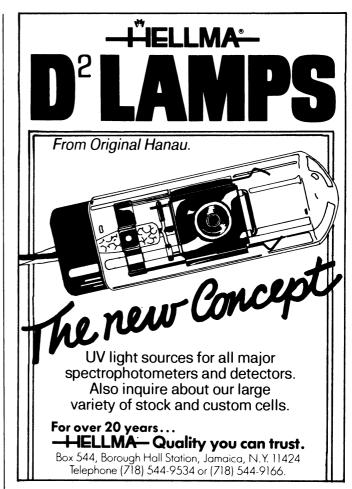
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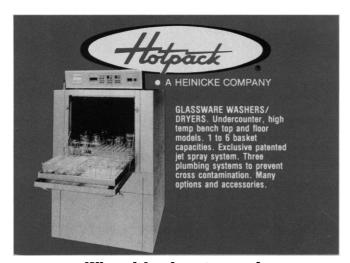
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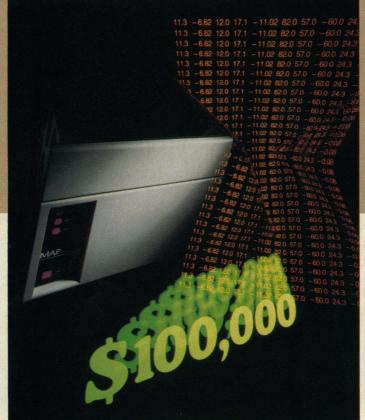
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ANATOMIST: THE DEPARTMENT OF CELL BI-OLOGY AND ANATOMY, THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE, invites ap-plications for a new junior faculty position, begin-ning July 1986, with teaching responsibility in human gross anatomy and active research in mammalian functional anatomy and evolution. Cell biologists and neuroanatomists will not be considered. Ph.D. or M.D. is required and previous teaching experiand neuroanatomists will not be considered. Ph.D. or M.D. is required and previous teaching experience in human anatomy is desirable. Send curriculum vitae and names of three references by 1 February 1986 to: Dr. Kenneth D. Rose, Chairman Search Committee, Department of Cell Biology and Anatomy, The Johns Hopkins University School of Medicine, 725 North Wolfe Street, Baltimore, Maryland 21205. Applications will be considered without regard to race, religion, sex, or national origin. The Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer.

AQUATIC ECOLOGIST

The Department of Zoology and the Graduate Program in Ecology of the University of Tennessee at Knoxville (UTK) seek an aquatic ecologist for a tenure-track appointment at the assistant professor level. Applicants should be able to teach an under-graduate course in aquatic ecology and have re-search interests which include the behavioral, evolunisms, or the communities or ecosystems to which nisms, or the communities or ecosystems to which these organisms belong. Applicants should send curriculum vitae, copies of recent publications, and the names of three references to: Dr. Stuart L. Pimm, Chairman, Aquatic Ecology Search Committee, Department of Zoology, The University of Tenessee, Knoxville, Tenn. 37996. Deadline for receipt of applications is 15 January 1986. UTK is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT/ASSOCIATE PROFESSOR OF BIOCHEMISTRY UNIVERSITY OF ILLINOIS AT CHICAGO COLLEGE OF MEDICINE

The Department of Biological Chemistry is seeking applications for a tenure-track assistant/associate professor position, effective academic year 1986. Applicants should have a Ph.D. and at least 2 years of postdoctoral experience. We are seeking candidates with a strong commitment to developing an independent research program using contemporary approaches to fundamental problems in biochemistry. The department is well-equipped and well-funded, having 22 full-time faculty members. The department is particularly strong in nucleic acid structure-function and gene regulation, membrane and cellular biochemistry, and lipid metabolism. Applicants should provide curriculum vitae, at least three letters of reference, and a brief statement of research interests and plans by 1 January 1986. Send applications to: Secretary, Biochemistry Search Committee, Department of Biological Chemistry, University of Illinois at Chicago, Ill. 60612.

The University of Illinois at Chicago is an Affir-The Department of Biological Chemistry is seek-

The University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR, BIOCHEMISTRY. Tenure-track position, beginning fall 1986, to teach undergraduate biochemistry and organic chemistry. Ph.D. degree and commitment to undergraduate teaching and research required. Send résumé, cover letter describing research interests, and three letters of references to: Dr. Edward J. Baum, Chairman, Department of Chemistry, Grand Valley State College, Allendale, Mich. 49401. Equal Opportunity/ Affirmative Action Employer.

ASSISTANT PROFESSORS OF BIOCHEMISTRY

The Department of Biochemistry at the University The Department of Biochemistry at the University of Rochester School of Medicine and Dentistry invites applications for several tenure-track faculty positions at the level of assistant professor. Candidates must have postdoctoral experience and an established record of research productivity. All research areas will be considered, including protein structure and function. Applicants should send curriculum vitae, a statement of research interests, and names of three references to:

Dr. Fred Sherman Chairman of Biochemistry University of Rochester School of Medicine and Dentistry 601 Elmwood Avenue, Box 607 Rochester, New York 14642

The University of Rochester is an Affirmative Action/Equal Opportunity Educational Institution M/F.

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TWO POSITIONS OPEN MOLECULAR NEUROBIOLOGY NEUROPHYSIOLOGY/NEUROPHARMACOLOGY INSTITUTE FOR ADVANCED BIOMEDICAL RESEARCH THE OREGON HEALTH SCIENCES UNIVERSITY

Applications are invited for two intermediate to senior level scientists, one in neurophysiology/neuropharmacology, the other in molecular neurobiology. These positions will be on the tenure track and may carry affiliate appointments as associate or full professor in an appropriate basic science department of the university.

The research of the institute will focus on investigations related to the molecular basis of nervous system function. Of particular interest are applications from molecular biologists working on the regulation of gene expression in the nervous system or the neuroendocrine system and scientists working in the general fields of molecular and cellular neurophysiology and/or neuropharmacology.

Generous start-up packages will be available to successful candidates. Laboratory space will be assigned in the institute's 80,000 square foot facility now under construction on the OHSU campus.

Scientists will have no formal teaching obligation. They will be encouraged, through affiliate faculty appointments, to participate in the graduate education program in the School of Medicine. Included will be the opportunity to participate in the early stages of development of interdisciplinary research programs in molecular and cellular neurobiology, immunology and endocrinology, and in setting up graduate and post-doctoral training programs jointly with the basic science and clinical departments of the university.

Applicants should have an established research program and a promise of further scientific accomplishment of the highest caliber. Applications should include a curriculum vitae, names of at least three references, selected reprints, and a description of current research and future goals. Applications should be addressed as is appropriate to:

Dr. Edward Herbert, Molecular Neurobiology Search Committee, or Dr. Eckard Weber, Neurophysiology/Neuropharmacology Search Committee

Institute for Advanced Biomedical Research—L474
The Oregon Health Sciences University
3181 SW Sam Jackson Park Road
Portland, Oregon 97201

The OHSU is an equal opportunity/affirmative action employer

DEVELOPMENTAL BIOLOGIST

Search has been reopened to fill Assistant Professor position available in the Department of Anatomy for a Developmental Biologist with research program in biochemical and functional aspects of a developing system; eg: gene expression, cell and tissue interaction, role of regulatory molecules in development. Must have postdoctoral experience and ability to develop independent, productive research program. Teaching responsibilities include: participation in teaching anatomical sciences in the Medical-Dental curriculum: participation in the graduate program in cell and developmental biology.
Prior teaching or training in Anatomy desirable, but not required. Applicants should submit curriculum vitae, list of publications, projected research plans, and names of three references, by: January 1st, 1986 to: Dr. Joseph A. Grasso, Developmental Biology Search Committee, Department of Anatomy

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MOLECULAR BIOLOGIST (PhD/MD) - Candidate should possess two to five years of post-doctoral training with emphasis in all aspects of recombinant DNA including cDNA/genomic library construction, DNA sequencing and gene expression using eukaryotic systems. Individual will join our inter-disciplinary team of R&D professionals to produce and characterize biologically active molecules

GENE LABS offers a competitive compensation package including stock options. EOE. Please send CV and three references in confidence to:

GENE LABS, INC. 871 Industrial Road, Bldg. J San Carlos, CA 94070

Ph.D. -Biotechnology Research

ZymoGenetics, Inc. is a Seattle-based biotechnology firm specializing in the research and development of human and other proteins of industrial and pharmaceutical value. A staff scientist position now open requires an individual with post-doctoral training, who has a rigorous understanding of animal cell biology as well as research experience in one or more of the following:

- · Protein Secretion in Mammalian Cells
- Heterologous Gene Expression
- Molecular Biology

ZymoGenetics offers excellent research facilities, competitive compensation and our location, proximate to the University of Washington, affords opportunities for professional development as well as a rich variety of recreational and cultural activities

To apply, please send a letter of application with a brief statement of research interests, and identification of three references, and your curriculum vitae to: Dept. SC-1115, ZymoGenetics, Inc., 2121 North 35th Street, Seattle, WA 98103. An Equal Opportunity Employer.



THE UNIVERSITY OF WESTERN ONTARIO London Canada

DEAN OF SCIENCE

Applications and nominations are invited for the position of Dean of Science, with the appointment to be effective 1 July 1986. The appointment is for a period of seven years, renewable. Candidates should have an established reputation as an academic researcher and teacher and should have the necessary administrative and inter-personal skills to provide leadership for the continuing development of the academic programs and research within the Faculty

The University of Western Ontario has a total enrollment of over 20,000 full-time equivalent students in graduate, undergraduate and professional programs.

The Faculty of Science has over 200 full-time faculty members in 11 different departments. The undergraduate programs have over 3,500 full-time students. In addition, the Faculty is responsible for the science academic program of the basic health science departments of the Faculty of Medicine. The Faculty is very active in research and graduate teaching with over 300 full-time equivalent graduate students.

Nominations and applications should be submitted by January 1, 1986 to:

Professor J.C. Leith Vice-President (Academic) and Provost Room 107, Stevenson-Lawson Building The University of Western Ontario London, Ontario MSA 588

Applicants should include a curriculum vitae and the names of at least three referees.

In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.

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CELLULAR AND MOLECULAR BIOLOGY OF NEOPLASIA

The Department of Medicine, Oregon Health Sciences University has initiated a comprehensive development program for the Division of Hematology and Medical Oncology. The department expects to fill two full-time assistant or associate professorships during the academic year with individuals who have completed clinical training in medical oncology or oncology/hematology and whose investigative interests relate directly to cellular and/or molecular biology of the neoplastic process. Although the minimum requirement is the MD degree, the positions are otherwise broadly defined and will be filled on the basis of excellence

Please submit curriculum vitae, copies of selected publications, a brief statement (one page) of research interests and the names of three references to:

Grover C. Bagby, Jr., M.D.
Head, Division of Hematology and
Medical Oncology
Oregon Health Sciences University
3181 SW Sam Jackson Park Road
Portland, OR 97201

Review of applications will begin November 20, 1985.

Oregon Health Sciences University is an affirmative action, equal opportunity employer.

ASSISTANT DEAN OF GRADUATE SCHOOL FOR MINORITY AFFAIRS AND DIRECTOR, Illinois Minority Graduate Incentive Program. Responsible for administering the Illinois Minority Graduate Incentive Program and other programs for minority graduate students. Doctorate required; preferably in the sciences or engineering and eligible for associate or full professor faculty appointment 15 March 1986 or after. Send letter, résumé, and references by 15 January 1986 to: Dean, Graduate School, Southern Illinois University, Carbondale, Ill. 62901. Equal Opportunity Employer.

ASSISTANT PROFESSOR, TENURE TRACK. Ph.D. in the life sciences or related field required. Teaching experience and commitment to liberal arts education essential. Responsibilities include teaching undergraduate courses to nonmajors on social and ethical questions related to science, technology, and society; the design and teaching of a course on "Biomedical Issues and Practice"; and a commitment to supporting the liberal arts curriculum. Send letter of application, curriculum vitae, and names of three references to: Dr. R. A. Bailey, Chairman, STS Committee, College of Liberal Arts, Rochester Institute of Technology (RIT), P.O. Box 9887, Rochester, New York 14623–0887. Deadline for receipt of applications is 1 January 1986. RIT is an Equal Opportunity/Affirmative Action Employer.

The Department of Biology and Museum of Southwestern Biology invite applications for tenure-track position, pending budgetary approval, as ASSISTANT PROFESSOR AND CURATOR OF HERPETOLOGY. Teaching responsibilities include freshman biology for majors/nonmajors. Candidate must be committed to teaching of biology as an essential part of a liberal education. Curator of herpetology must actively manage and enhance a modern research collection containing over 40,000 specimens. Successful applicant is expected to develop and maintain vigorous research program and generate extramural funding. Earned doctorate required and curatorial experience desired. Candidates in any area of herpetological research considered. Applications should include curriculum vitae, statement of research interests, copies of reprints, and three letters of reference sent separately by 15 January 1986 to: Dr. J. David Ligon, Department of Biology, The University of New Mexico, Albuquerque, N.M. 87131. Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR OF BIOLOGY

TWO positions will be available starting September 1986. Seeking broadly trained biologists who can teach at least four of the following: electron microscopy, botany, cell biology, comparative anatomy, ecology, embryology, radiobiology, and immunology. Send curriculum vitae to: Dr. Mary Newton, Department of Biology, Manhattanville College, Purchase, N.Y. 10577. Liberal Arts college just north of New York City. Equal Opportunity Employer.

ASSISTANT PROFESSOR, BIOMATHEMATICS PROGRAM. Research in applications of mathematics and statistics to the biological sciences. Expertise in stochastic modeling preferred. Ph.D. in a mathematical science or a biological science if sufficient mathematical ability. Résumé, transcripts, and three letters of recommendation by 31 January 1986 to: Biomathematics Search Committee, Department of Statistics, Campus Box 8203, North Carolina State University, Raleigh, N.C. 27695–8203. Affirmative Action/Equal Opportunity Employer.

UNIVERSITY OF CALIFORNIA, SANTA BARBARA: The Department of Chemical and Nuclear Engineering has FOUR openings for tenure-track ASISTANT PROFESSORS IN CHEMICAL ENGINEERING. Candidates with exceptional records of achievement and experience will be considered for more senior positions. A Ph.D. and promise for an outstanding career in teaching and research are required. Research areas are open, but preference will be given to candidates with a strong background in polymer engineering, semiconductor and electronics materials processing, and biochemical engineering. Applicants should submit a résumé, reprints of three representative publications, a statement of research plans, and names of four references to: Professor Sanjoy Banerjee, Chairman, Department of Chemical and Nuclear Engineering, University of California, Santa Barbara, Calif. 93106. Applicants are encouraged to respond as soon as possible; applications will be received until positions are filled. The University of California is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR

Applications are invited for a faculty position in an integrated molecular and clinical unit of human genetics. Applicants should be able to develop a research program in human gene mapping, linkage analysis, gene isolation and characterization, and also to supervise a molecular diagnostic facility. Experience in both molecular biology and human genetics would therefore be advantageous. Opportunities for basic science teaching and for clinical genetic activity also available. Please send inquiries, résumés, and letters of recommendation to: Dr. T. Friedmann, Human Genetics Program, Center for Molecular Biology and Department of Pediatrics, UCSD School of Medicine, La Jolla, California 92093.

ASSISTANT PROFESSOR OF BIOLOGY

As part of a continuing program of growth and development, the Boston College Biology Department plans to fill a tenure-track position by September 1986. The department has active research programs in developmental biology, neurobiology, immunology, reproductive biology, and cell and molecular biology. During the past 2 years we have added three new faculty members to complement these strengths.

We now seek candidates with active research interests in virology or immunology. However, strong applicants in all areas of cellular biology are encouraged to apply

we offer a competitive salary and start-up funds. Applications, including three letters of reference solicited by the candidate, should be submitted by 15 December 1985 to:

Chairman, Biology Search Committee Biology Department Higgins Hall Boston College Chestnut Hill, Mass. 02167

The Department of Molecular Biology and Biochemistry, University of California, Irvine, has a position at the ASSISTANT PROFESSOR level (tenure track) in the area of MOLECULAR IMMUNOLOGY. Candidates will apply molecular approaches to understanding the immune system. Candidate research can be focused on any one of a broad range of topics such as: cell-induced cytolysis, antigen recognition, immunoregulation, and hematopoiesis. We encourage applicants with several years of postdoctoral experience who wish to establish independent research programs. The position will require the individual to be responsible for undergraduate and graduate teaching in immunology. Please submit curriculum vitae, recent reprints, a statement on research goals, and three letters of recommendation to Profesor G. A. Granger, Immunology Search Committee, Department of Molecular Biology and Biochemistry, University of California Irvine, Irvine, Calif. 22717. The University of California is an Equal Opportunity/Affirmative Action Employer and Educator.

ASSISTANT PROFESSOR: PERSONALITY/SO-CIAL PSYCHOLOGY—Tenure-track position described in SCIENCE, 18 October 1985. DEADLINE for applications is 1 February 1986. SALARY is negotiable. Address required application materials to: Chairman, Personality/Social Search Committee, Department of Psychology—282NI, Northeastern University, 360 Huntington Avenue, Boston, Mass. 02115. Women and minorities are encouraged to apply. Northeastern University is an Equal Opportunity Employer.

BIOLOGY EDUCATION

Applications are invited for a tenure-track position at the assistant professor level for an individual whose primary responsibilities will be in the area of biology education. Duties will include teaching a methods course for teachers in secondary schools, supervising student teachers, offering workshops and summer institutes, and maintaining liaison with area science teachers. The person may also teach biology courses in his/her area of expertise. The successful candidate will be expected to engage in research in science education. Candidates must have a Ph.D. or equivalent degree in a biological science and experience in science education.

and experience in science education.

Applicants should submit transcripts, curriculum vitae, three letters of recommendation, and a statement of professional interests and/or research plans to: Biology Education Search Committee, Biology Department, Southern Illinois University, Edwardsville, Ill. 62026. Closing date for receipt of application is 15 January 1986, or until the position is filled. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

OHIO UNIVERSITY DEPARTMENT OF CHEMISTRY

TWO tenure-track positions are available at the ASSISTANT PROFESSOR level for individuals with interests at the interface areas of chemistry and biology. Selected candidates will be expected to contribute vigorously to both the research and teaching functions of the department, which has 19 faculty and 40 graduate students.

1) BIOCHEMISTRY—Candidates in any research area are invited to apply, with those candidates with expertise in DNA enzymology and/or recombinant techniques being particularly encouraged.
2) PHYSICAL CHEMISTRY—Candidates of spe-

 PHÝSICAL CHEMISTRY—Candidates of special interest are those with expertise in areas of biophysical chemistry, particularly photochemistry or physical chemistry of biopolymers.

Applications should include curriculum vitae and a research plan and are to be forwarded to: Dr. P. Johnson (Biochemistry) or Dr. P. D. Sullivan (Physical Chemistry), Department of Chemistry, Athens, Ohio 45701. Applicants should also arrange to have three letters of reference mailed to the department. The closing date for applications is 31 December 1985.

Ohio University is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR-ECONOMIC ENTOMOLOGIST/INSECT PEST MANAGMENT

Tenure-track includes experiment station and academic responsibilities. Duties include developing an active research program in pest management of insects of turf, ornamental, and landscape plants. Teaching in area of speciality and/or participation in the economic entomology curriculum. Qualifications include a Ph.D. in entomology or a related discipline and extensive training in economic entomology. Forward (i) curriuculm vitae and transcripts, (ii) names and addresses of five referees, (iii) bibliography, (iv) reprints and manuscripts in press, and (v) dissertation summary and statement of research interests to: Dr. M. K. Rust, Chairman Search Committee, Department of Entomology, University of California, Riverside, Calif. 92521. Applications will be accepted until 1 February 1986.

ASSISTANT PROFESSOR OF MICROBIOLOGY

Tenure track. Starting 15 September 1986. Ph.D. in microbiology required. Successful candidate will be required to teach undergraduate microbiology, pathogenic microbiology, virology, and a graduate course in professional specialty. Send application, résumé, and three letters of recommendation to: Dr. Anthony E. Sobota, Youngstown State University, Department of Biological Sciences, 410 Wick Avenue, Youngstown, Ohio 44555. Closing date is 15 January 1986. An Affirmative Action/Equal Opportunity Employer.

ASSISTANT/ASSOCIATE PROFESSOR OF PHAR-MACOLOGY. Applications are invited for a tenure-track faculty position in a research-oriented Department of Pharmacology. Minimal qualifications include a Ph.D. or M.D. degree with strong postdoctoral experience. Candidates must be capable of mounting a vigorous research program and participating in the teaching of medical, dental, and graduate students. The department has active research programs in cardiovascular, biochemical, and neuro-harmacology. Applicants with a background in vascular endothelium or smooth muscle are especially encouraged. Available February 1986. Send curriculum vitae to: E. G. Anderson, Department of Pharmacology, College of Medicine, University of Illinois at Chicago, 835 South Wolcott, Chicago, Ill. 60612. To assure full consideration, apply by 15 December 1985. The University of Illinois is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities.

ASSISTANT PROFESSOR (RESEARCH) OR INSTRUCTOR (RESEARCH)

To participate in a recently renewed (5 years) NIH Program Project on lipoprotein-apoprotein metabolism and reverse cholesterol transport. Experience in lipoprotein-apoprotein metabolism is helpful but not required. Postdoctoral experience in protein or immunochemistry, lipid chemistry, general biochemistry, or related disciplines required. Position is commensurate with experience. Attractive salary.

Please send curriculum vitae to: Dr. Paul S. Roheim, pepartment of Physiology, Louisiana State University Medical Center (LSUMC), 1542 Tulane Avenue, New Orleans, Louisiana 70112-2822. LSUMC is an Equal Opportunity/Affirmative Action Employer.

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Becton Dickinson's Immunodiagnostics Division has an immediate opening for a R&D Group Leader. This is a key role supervising a team working in nonisotopic immunoassay. A PhD in Biochemistry or Immunology is preferred but degrees in other biological or physical sciences will be considered. A strong background in immunodiagnostics test development is necessary. Familiarity with nonisotopic immunoassay is an important plus, as are industrial and supervisory experience.

As a world leader in diagnostic health care development, Becton Dickinson offers excellent salaries, comprehensive benefits and career growth opportunities at our suburban facility in Rockland County, just a short drive from New York City. For prompt consideration, send your resume to: Mr. Pete Malecki, Director of Human Resources, Becton Dickinson Immunodiagnostics, Mountain View Avenue, Orangeburg, NY 10962. An equal opportunity/affirmative action employer.

Caring for people is our business

BECTON DICKINSON

GENETICS INSTITUTE, INC., located in Cambridge, Massachusetts, is a recognized leader in the field of biotechnology. Our research is committed to the development and application of recombinant DNA technology to human health care, agriculture, and chemicals.

We are currently expanding our research and development efforts and have the following openings:

Protein Biochemistry

We currently are recruiting for two Ph.D. protein biochemists to work on the purification and characterization of protein pharmaceuticals produced through recombinant DNA technology. The ideal candidates will have 0-3 years' postdoctoral experience with a strong background in bioseparation techniques (conventional, HPLC, and immunoaffinity) and experience in elucidating structure function relationships of proteins.

Protein Purification

A position is currently available for a talented Ph.D. to study and purify growth factors. The successful candidate will have a Ph.D. in biochemistry or related field with 1-3 years' postdoctoral experience in protein purification techniques.

We offer a stimulating scientific environment in addition to an excellent salary, equity participation and complete benefits package.

Qualified candidates should forward their resumes, in confidence, to: Barbara Covel, Genetics Institute, 87 CambridgePark Drive, Cambridge, MA 02140.

Genetics Institute

Director

MRC Mammalian Genome Unit : Edinburgh

The Medical Research Council invites applicants for the post of full-time Director of the MRC Mammalian Genome Unit on the resignation of the present Director, Dr E M Southern FRS to take up the Whitley Chair of Biochemistry at the University of Oxford.

Research facilities will continue to be provided in the Unit's present accommodation which is located on the Kings Buildings site in the University of Edinburgh. The Unit is concerned with studies of the eukaryotic genome, its organisation and function, with emphasis on the potential for application to clinical problems. The new Director will be expected to put forward research proposals which are appropriate both to the existing expertise within the Unit and to his/her own personal scientific interests. The precise scope and emphasis of the Unit's future programme will be a matter for discussion between the successful candidate and the Council.

The person appointed will have an established reputation as a scientific investigator in the field of eukaryotic chromosome structure and function, be able to develop the Unit's research programme and have the ability to manage and co-ordinate a research team.

An appointment to MRC staff will be in accordance with the Council's terms and conditions of service and superannuation provision will be under the MRC pension scheme. The salary will be within the Council's special appointments grade which is equivalent to the Universities' professorial range.

Additional information may be obtained from Dr S C Aitken, MRC Headquarters Office, 20 Park Crescent, London W1N 4AL, England, Telephone 01-636 5422 ext 206.

Applications in the form of a short statement (about 1000 words) outlining in general terms the scientific programme which the applicant would propose for the Unit, together with a curriculum vitae: list of publications, and the name of three referees, should be submitted no later than 3 January 1986 to the Second Secretary of

the Medical Research Council at the above address.

MRC

Medical Research Council

HEAD, DEPARTMENT OF BIOLOGY UNIVERSITY OF SOUTHWESTERN LOUISIANA

The College of Sciences of The University of Southwestern Louisiana invites applications and nominations for the position of Head of the Depart-

ment of Biology at the rank of associate professor or full professor. Duties begin with the fall semester of the 1986 to 1987 academic year.

The University is the second largest in Louisiana with an enrollment of more than 16,000. The Department of Biology offers an M.S. program in biology and a Ph. D. program in any incompatial and apoly. and a Ph.D. program in environmental and evolu-tionary biology that encompasses studies from the molecular to the community levels of organization. The biology faculty numbers 22, the majority of whom are engaged in research. The strong commit-ment of the university administration to excellence in research, graduate, and undergraduate education has been important to the development of the re-search faculty and facilities. The department is

has been important to the development of the research faculty and facilities. The department is housed in a newly renovated building with an excellent array of research equipment. Special facilities include a well-equipped EM laboratory, aquatic laboratory, and links to two campus mainframe computers with extensive software. The University is also an affiliate member of the Louisiana Universities Marine Consortium (LUMCON).

Applicants must possess an earned doctorate, an active research program of high quality, a record of distinguished teaching, and sufficient administrative experience to guide a rapidly developing department. Persons with research programs in theoretical or experimental evolutionary biology are particularly encouraged to apply. For initial consideration, applications should be received by 15 December 1985. Please submit curriculum vitae, recent reprints, a statement of research goals, and a statement of administrative philosophy and have three letters of reference sent to: James F. Jackson, Search Committee Chairman, Department of Biology, Box 42451, University of Southwestern Louisiana, Lafayette, La. 70504, telephone: 318-231-6756. An Equal Opportunity/Affirmative Action Employer.

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********* MOLECULAR GENETICS SHOWA UNIVERSITY RESEARCH INSTITUTE FOR BIOMEDICINE

Three positions are available in the newly formed Three positions are available in the newly formed Department of Molecular Genetics at the Showa University Research Institute in St. Petersburg, Florida. One investigator is sought to direct a biotechnology facility that will possess state of the art instrumentation for resolution of peptide-protein sequences and synthesis of peptides and gene-specific oligodeoxynucleotide probes. This individual also is expected to conduct an independent research program in a great that complements institutional program in a great that complements institutional proexpected to conduct an independent research program in an area that complements institutional programs. Two independent scientists are sought who are interested in eukaryotic molecular genetics. Areas of immediate interest are control of gene expression and replication, developmental molecular biology, and transgenic expression and organization of gene families. Persons should utilize molecular genetic approaches and be interested in developing their own programs as well as participating in multidisciplinary collaborative studies. Preference will be given to those programs that are directly involved with or seek to resolve basic issues in human disease.

ease.

Showa University is unique in its affiliation with a major Japanese Medical University. The Institute is based in a new facility with excellent individual laboratory and office space and centralized services. Investigators are allowed complete freedom to pursue research goals and while generous program support is provided, scientists are expected to secure extramural funding. Both postdoctoral and predoctoral opportunities exist. Ranks will be commensurate with experience and research accomplishments. Salary, fringe benefits, and start-up support are excellent.

Individuals interested in these positions should send their curriculum vitae and list of publications to: Chairman, Molecular Genetics Search Committee, Showa University Research Institute for Biomedicine 10900 Roosevelt Boulevard, St. Petersburg, Florida 33702. Senior and mid-level candidates are invited to submit a brief description of extramurally funded research and a current research support statement. A not-for-profit organization/Equal Opportunity

POSITIONS OPEN

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO DEPARTMENT OF PHARMACOLOGY AND NEUROSCIENCE PROGRAM

The Department of Pharmacology and the Neuroscience Program at the University of California, San Francisco, seeks to fill a tenure-track position at the ASSISTANT PROFESSOR level. Preference will be given to applicants with a strong commitment to investigating the molecular basis of intercellular communication. A strong background in membrane biochemistry and/or biophysics is required. Successful candidates will be expected to teach professional and graduate students. Anticipated starting date: June 1986. Letters of application should be accompanied by curriculum vitae and bibliography, a narrative description for future directions in research, and the names and addresses of three references. Please send all materials to: Dr. Roger A. Nicoll, Department of Pharmacology, 1210 Medical Sciences Building, University of California, San Francisco, Calif. 94143. The closing date for application is 15 March 1986. The University of California is an Affirmative Action/Equal Opportunity Employer.

UNIVERSITY OF MICHIGAN DEPARTMENT OF PHYSICS

The University of Michigan Department of Physics is accepting applications for an ASSISTANT RESEARCH SCIENTIST position in high energy physics. The position is for an experimentalist who would initially work on analysis of data from the upgraded IMB proton decay detector and a new proposal to search for 100-TeV gamma rays at the Fly's Eye. Applicants should have a Ph.D. and at least 1 year of relevant nostdoctoral experience. Fly's Eye. Applicants should have a Ph.D. and at least 1 year of relevant postdoctoral experience. Applications, including the names of three references, should be addressed to: Professor L. W. Jones, Randall Laboratory of Physics, University of Michigan, Ann Arbor, Michigan 48109–1120. Please reference Posting Number HEP-001.

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

Oregon State University: The College of Agricultur-Oregon State University: The College of Agricultural Sciences invites nominations and applications for the position of ASSOCIATE DEAN, COLLEGE OF AGRICULUTURAL SCIENCES/DIRECTOR OF OREGON AGRICULTURAL EXPERIMENT STATION. The Associate Dean/Director administers and leads the statewide research programs of the Oregon Agricultural Experiment Station, including research conducted by subject-matter departments and research centers. This individual, together with the Associate Deans/Directors of Extension, Academic Programs and International Agriculture, is a principal associate of the Dean of the College of Agricultural Sciences and team member in administering the college's research, extension, teaching, Agricultural Sciences and team member in adminis-tering the college's research, extension, teaching, and international programs. Qualifications include Ph.D. degree with at least one degree in agriculture or a related discipline and experience in administraor a related discipline and experience in administration, competitive grant procurement, and ability to perceive priority research needs of agriculture. The position is a 12-month appointment at the rank of professor. Salary will be commensurate with experience and qualifications. Position available 1 July 1986. Nomination deadline is 31 January 1986, application deadline is 14 February 1986. For more information, nominations, or application contact: Dr. Fredrick Stormshak, Chair, Search Committee, Department of Animal Science, College of Agricultural Sciences, Oregon State University, Corvallis, Oregon 97331-6702. Telephone: 503-754-2325.

Oregon State University is an Affirmative Action/ Equal Opportunity Employer and complies with Section 504 of the Rehabilitiation Act of 1973.

UNIVERSITY OF ROCHESTER, SCHOOL OF MEDICINE AND DENTISTRY DEPARTMENT OF PHYSIOLOGY ASSOCIATE PROFESOR/PROFESSOR

Applications for a tenured research and teaching position are invited. Physiologists and biophysicists studying transport mechanisms in epithelial cells and/or regulation of cellular processes will be considered. Aplicants should be involved in the development of new concepts or techniques or their application to situations not previously studied. Specific area of interest is less important than creative work at the forefront of the field. Curriculum vitae, description of research interests, and a list of four or more references should be sent to: Dr. Paul Horowicz, Department of Physiology, Box 642, Uni-versity of Rochester, School of Medicine and Dentis-try, Rochester, N.Y. 14642. Equal Opportunity Em-ployer, MIF.

POSITIONS OPEN

Tulane University School of Medicine—Seeking ASSOCIATE PROFESSOR OR PROFESSOR OF MEDICINE in the Endocrine Section of the Department of Medicine to fill the newly established Tullis-Tulane Alumni Chair of Diabetes. The individual selected must be internal medicine Board-certified selected must be internal medicine Board-certified and endocrine/metabolic Board-certified/eligible. Academic experience preferred. The position involves teaching, patient care, and research responsibilities. Apply to: C. Y. Bowers, M.D., Tulane School of Medicine, 1430 Tulane Avenue, New Orleans, La. 70112. Include updated curriculum vitae. Deadline is 6 December 1985. Tulane University is an Affirmative Action/Found Opportunity Employer. tive Action/Equal Opportunity Employer.

OKLAHOMA MEDICAL RESEARCH FOUNDATION (OMRF) Associate Research Scientist and Postdoctoral Positions

in Protein Molecular Biology

The Oklahoma Medical Research Foundation is a growing research institute located on the campus of the University of Oklahoma Health Sciences Center. The research programs of the Foundation include both basic and clinical biomedical sciences. The Foundation has a postgraduate program in various fields through the affiliation with the Graduate College of the University of Oklahoma.

An associate research scientist position and a postdoctoral position are available by late 1985 to do joint work on the structure and function of proteins using molecular biology and site-directed mutagenesis approaches. A background in molecular biology is desirable. Salary levels above NIH scale.

Send response to: Dr. Jordan Tang, Head, Protein Studies Program, OMRF, 825 Northeast 13 Street, Oklahoma City, Okla. 73104. Oklahoma Medical Research Foundation is an Equal Opportunity/Affirmative Action Employer.

BEHAVIORAL-MOLECULAR NEUROBIOLOGIST

The Institute of Animal Behavior, Rutgers—The State University of New Jersey (Newark Campus), invites applications for a tenure-track appointment (assistant professor level preferred). We are particularities and in the state of the state o larly interested in applicants using current molecular biological and biochemical techniques to study the biological and biochemical techniques to study the underlying neuropeptide, other neurotransmitter, and hormonal regulating mechanisms of reproductive behavior in mammals. Opportunities exist to collaborate extensively within the Institute of Animal Behavior, with Chemistry and Zoology Department members and with members of the Neuroscience Department of the University of Medicine and Dentistry of New Jersey (Newark), and to participate in a newly established Molecular and Behavior-al Neuroscience Center. Applicants should submit pate in a newly established Molecular and Behavioral Neuroscience Center. Applicants should submit curriculum vitae, names and addresses of three references, and a brief statement of research plans to: Jay S. Rosenblatt, Director, Institute of Animal Behavior, Rutgers—The State University of New Jersey, 101 Warren Street, Newark, New Jersey 07102. Rutgers University is an Equal Opportunity/Affirmative Action Employer.

CALIFORNIA STATE UNIVERSITY, LONG BEACH (CSULB)

Tenure-track positions available at CSULB, fall 1986. Must have Ph.D.; postdoctoral experience preferred. A commitment to teaching and research is

Gell Physiologist—(one joint with Women's Studies) Geologist—Invertebrate, paleontology, stratigraphy and field.

Physicist—Modern optics.
Chemist—Biophysical.
Microbiologist—Molecular genetics/Immunology.
Science Education—Joint with School of Education.

Send résumé, research plans, transcripts, and three senu resume, research plans, transcripts, and three letters of recommendation to: Dean, School of Natural Sciences, CSULB, Long Beach, Calif. 90840. CSULB is an Equal Opportunity/Affirmative Action/Title IX Employer.

CLINICAL NEUROPHYSIOLOGIST: Columbia CLINICAL NEUROPHYSIOLOGIST: Columbia University seeks a full-time BE or BC neurologist to establish and direct a clinical motor physiology laboratory. Documented expertise in EMG and movement disorders is required. Capability for independent research funding is desirable. Please reply to: Dr. Timothy A. Pedley, The Neurological Institute, 710 West 168 Street, New York, N.Y. 10032. Columbia University takes Affirmative Action to ensure Eval Opportunity. ensure Equal Opportunity.

Occupational/Environmental Health Specialist Industrial Hygienist

Brookhaven National Laboratory, a major research and development facility, has two challenging opportunities for an Industrial Hygienist and an Occupational/Environmental Health Specialist to carry out technical support and related research for our Safety and Environmental Protection Division.

Industrial Hygienist

The major scope of your responsibility will include operational industrial hygiene consultation to several Laboratory departments. You will also be required to evaluate chemical toxic effects and prepare and review toxic/material assessment advisory reports. The successful candidate will have acquired an M.S., Ph.D. or equivalent in toxicology, environmental health, epidemiology or a related field. Excellent technical writing skills, A.B.I.H. certification and experience with data base management systems are highly desirable.



Occupational/Environmental Health Specialist

Your responsibilities will include literature research, preparation and review of computer data base information, and evaluation of chemical toxic effects. You will also be required to prepare and review toxic material/assessment support for the Laboratory's Industrial Hygiene Group. The successful candidate will have acquired an M.S. or Ph.D. or equivalent in toxicology, environmental health, epidemiology or a related field. Excellent technical writing skills and experience with data base management systems are highly desirable. Knowledge of existing technical data bases would be a plus.

Brookhaven, located on a 5,000 acre campus-like site, offers a stimulating professional environment. Our comprehensive benefits package includes medical, dental, retirement plans, 24 days annual vacation and relocation allowances. If you would like to explore this exceptional opportunity, please send your resume with salary historyto: Mr. Peter Esposito, Brookhaven National Laboratory, Associated Universities, Inc., Personnel Building 185, Upton, NY 11973. Equal Opportunity Employer.

NIH STAFF FELLOWSHIP FOR MOLECULAR BIOCHEMIST

The National Institutes of Health (NIH). National Institute of Neurological and Communicative Disorders and Stroke (NINCDS). invites applications for a Staff Fellowship position in the Laboratory of Neurophysiology, Section on Receptor Biochemistry (Dr. J. Craig Venter, Section Chief). This Section is examining the structure and function relationships of neurotransmitter receptor proteins including adrenergic, cholinergic, and GABAergic. We seek a highly motivated, skilled individual with a strong molecular biology/bio-chemistry background to perform advanced research on neurotransmitter receptor gene structure, expression and regulation.

Candidates must (1) have less than seven years of professional research experience; (2) be U.S. Citizens or resident aliens who

would be eligible for citizenship within four years; and (3) either have been awarded their doctoral degrees in a science related to this position, or have been certified by a university as meeting all requirements leading to such a doctorate. The salary will range from \$17,000 to \$47,788 per year commensurate with education and experience.

Please send curriculum vitae and three (3) letters of reference to

Mr. Clifford Schein NINCDS Personnel Office (NIH) Building 31, Room 8A25 9000 Rockville Pike Bethesda, Maryland, 20892.

For more information call Mr. Schein on (301) 496-6334.

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

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BIOCHEMIST POSITION, Department of Biochemistry and Molecular Biology, Mayo Medical School. Available immediately. Rank dependent upon qualification of applicant. Research position with minor percent of effort directed to medical or graduate education. Candidates with interests in phosphotidyl inositol pathway, growth factors, protein chemistry, or protein crystallography preferred, but outstanding candidates with other research interests will be considered. Send curriculum vitae, bibliography, statement of research interests, and names of three references by 31 December 1985 to: R. J. Ryan, M.D., Department of Biochemistry and Molecular Biology, Mayo Medical School, Rochester, Minn. 55905. Telephone: 507-284-2310. An Equal Opportunity/Affirmative Action Institution.

BIOCHEMIST/IMMUNOCHEMIST PH.D., AS-SISTANT/ASSOCIATE PROFESSOR, SAN JOSE STATE UNIVERSITY. Fall 1986 tenure-track position in the B.S./M.S. chemistry programs. Research expertise needed in immunochemistry and protein biochemistry. Candidates must have a strong commitment to both teaching and research. San Jose State, with 24,000 students, is located in a biotechnology area. The Chemistry Department employs 30 faculty and is well equipped for teaching and research. The university has an excellent Nuclear Science Facility available to faculty and students. Send curriculum vitae, transcripts, a statement of your teaching interests/philosophy, a brief statement of your research plans/needs, and three letters of reference to: Chairman, Chemistry Department, San Jose State University, San Jose, Calif. 95192, by 15 January 1986. An Equal Opportunity/Affirmative Action Employer.

Assistant research scientist non tenured position is available for BIOCHEMICAL TOXICOLOGIST to carry out research on transition state inhibitors of hydrolytic enzymes. Ph.D. in entomology, biochemistry, toxicology, or related field. Background in biochemistry or toxicology essential. Experience in enzyme kinetics and isolation, organic synthesis, and QSAR analysis, and in vivo toxicity testing in vertebrate and insect systems desirable. Full-time position, salary approximately \$31,200, plus benefits (anticipated range adjustment as of 1 January 1986: \$32,800). Job site: Davis, California. Send this ad and a résumé, transcripts, list of publications, and names and addresses of at least three references to: Job Number 5291, P.O. Box 9560, Sacramento, Calif. 95823-0560 not later than 30 November 1985.

CELLULAR/MOLECULAR NEUROBIOLOGY

Tenure-track Assistant Professor positions are available at the University of Southern California. Particular attention will be given to those working with molecular genetic, immunological, and/or cell culture methods, but individuals in any area of cellular or molecular neurobiology are encouraged to apply. Candidates will be expected to establish an independent research program, contribute to the teaching program of the department, and participate in the university's new Program for Neural, Informational, and Behavioral Science. Please send curriculum vitae, names and telephone numbers of three references, and a brief description of career goals and research objectives by 15 December 1985 to: George Augustine, Chairman, Neurobiology Search Committee, Section of Neurobiology, Department of Biological Sciences, University of Southern California, Los Angeles, California 90089–0371. The University of Southern California is an Equal Opportunity/Affirmative Action Employer.

Distinguished Faculty in Neurobiology

The University of Southern California seeks senior neurobiologists of outstanding research and teaching ability. The University has initiated a new interdisciplinary program in the Neural, Informational, and Behavioral Sciences. Outstanding investigators in neurobiology as well as psychology, linguistics, computer science, mathematics, physics, and engineering will be invited to help design the newly approved Hedco Neurosciences Building and will participate in the research and teaching efforts of the program. Interested applicants in the field of neurobiology should submit their curriculum vitae to:

Professor N. Arnheim Chairman, Search Committee Department of Biological Sciences University of Southern California University Park Los Angeles, Calif. 90089-0371

The University of Southern California is an Equal Opportunity Employer.

POSITIONS OPEN

CELL/MOLECULAR BIOLOGIST

A tenure-track Assistant Professorship will be filled September 1986 by an individual with demonstrated research ability in cell and molecular biology. Oregon State University is committed to strength in molecular biology, and in the period 1983 to 1986, will have filled nine to ten new positions in the area of gene research. We encourage applications from individuals with postdoctoral training and expertise in recombinant DNA techniques and research interests that complement our programs in developmental biology, endocrinology, genetics, immunology, or neurobiology. Faculty in our department are expected to maintain active research programs and teach undergraduate and graduate level courses. Applications should include curriculum vitae, reprints, and names and addresses of three references. Deadline: 15 January. Cell Biology Search Committee, Department of Zoology, Oregon State University, Corvallis, Ore. 97331. OSU is an Affirmative Action/ Equal Opportunity Employer, and complies with Section 504 of the Rehabilitation Act of 1973.

CELL BIOLOGY, PARASITOLOGY. Postdoctoral fellowship. Background in electron microscopy essential. University in New York City. Affirmative Action Employer. Can begin immediately. Box 244, SCIENCE.

DEAN, COLLEGE OF ARTS AND SCIENCES. Boise State University seeks nominations and applications for the position of dean of the College of Arts and Sciences. The dean serves as the academic leader and chief administrator for the college, which includes nine departments. Selection criteria include: an earned doctorate; teaching and administrative experience; evidence of scholarship and/or creative activity; and demonstrated success as a leader. All application materials including résumé, graduate transcripts, three letters of recommendation, and other pertinent information should be postmarked by 31 December 1985. Nominations and applications should be sent to: Search Committee, Dean of Arts and Sciences, Office of the Executive Vice President, Boise State University, 1910 University Drive, Boise, Idaho 83725. Equal Opportunity/Affirmative Action Institution.

DIRECTOR, ASIAN-AMERICAN STUDIES CENTER UNIVERSITY OF CALIFORNIA, LOS ANGELES (UCLA)

Applications and nominations are again invited for the position of director of the Asian-American Studies Center (AASC) at UCLA, effective 1 July 1986. The center supports faculty and postgraduate research and fosters interdisciplinary training and experience, including a master's degree program, in the field of Asian-American studies. The center also conducts a publications program and is responsible for developing undergraduate curriculum in Asian-American studies. A substantial technical staff and budget are assigned to the center. Candidates must qualify for a tenured appointment in a department or professional school at UCLA. Previous research, publication and teaching in the field of Asian-American studies, as well as demonstrated administrative ability, will be factors in this search.

Please send curriculum vitae and references by 1 January 1986 to: Asian-American Studies Center Search Committee, Office of the Chancellor, in care of Nancy Duggan, University of California, Los Angeles, Calif. 90024. UCLA is an Affirmative Action/Equal Opportunity Employer.

Candidates are invited to apply for a tenure-track FACULTY POSITION in the Department of Pharmacology, Duke University. Applicants with background in all areas of research related to pharmacology will be considered. Please send your curriculum vitae and names of three references to: Dr. N. Kirshner, Department of Pharmacology, Duke University Medical Center, Durham, N.C. 27710. Duke University is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION. The Department of Natural Sciences of LeMoyne-Owen College announces a position effective spring 1986 or fall 1986. Applicants with a background in anatomy, physiology, and biochemistry will be considered. Applicants should have a strong commitment to teaching and biomedical research at an undergraduate institution. Send curriculum vitae, a short summary of current research interests and transcripts to: Dr. Delphia Hamill, Chair, Department of Natural Sciences, LeMoyne-Owen College, 807 Walker Avenue, Memphis, Tenn. 38126. LeMoyne-Owen is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

DEVELOPMENTAL BIOLOGIST, ASSISTANT PROFESSOR POSITION. The Department of Biology at Indiana University-Purdue University in Indianapolis (IUPUI) invites applications for a tenuretrack position available August 1986. Teaching responsibilities include an undergraduate biology major course in embryology and a graduate course in developmental biology. The successful candidate should have a Ph.D. degree with at least 2 years of postdoctoral training and be able to conduct an extramurally funded research program. Applications should include curriculum vitae, copies of representative publications and/or grant proposals, a description of previous teaching experience, and transcripts of graduate and undergraduate courses. The applicants should also arrange to have at least three letters of reference sent under separate cover. All materials should be received no later than 15 January 1986 by: Professor Shirley A. Bayer, Search and Screen Chairman, Department of Biology, IUPUI, P.O. Box 647, Indianapolis, Ind. 46223. IUPUI is an Equal Opportunity/Affirmative Action Employer.

DIRECTOR OF HYBRIDOMA LABORATORY OF ARKANSAS BIOTECHNOLOGY CENTER. Position will direct development of applied research in improvement of hybridoma techniques, new product development, and initial production of monoclonal antibodies for both university and private sectors. Funding provided by the State of Arkansas and PelFreez, Inc. Ph.D. and appropriate postdoctoral experience are required with industrial experience preferred. Send résumé and three letters of recommendation to: D. O. Pederson, Administration Building, Room 418, University of Arkansas, Fayetteville, Arkansas 72701. Candidate's credentials will be reviewed by a consulting firm beginning 10 December 1985. The University of Arkansas is an Equal Opportunity/Affirmative Action Employer.

DIRECTOR OF LASER BIOPHYSICS CENTER UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES

The Uniformed Services University School of Medicine seeks an individual with superior credentials to be the director of its Laser Biophysics Center. Candidates must, at a minimum, possess a Ph.D. or Sc.D. Candidates must have experience in biophysical research, teaching and program development, administration, and research. The incumbent is responsible for assuring that a productive and meaningful structure is in place to support the university's Medical Applications of Advanced Laser Technology research program. Salary is commensurate with background and experience.

Interested individuals should submit curriculum vitae, bibliography, and three letters of recommendation to: Civilian Personnel, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, Maryland 20814—4799. To be considered, applications must be in the Personnel Office by 15 November 1985.

The Uniformed Services University is an Equal Opportunity/Affirmative Action Employer.

DIRECTOR OF NEUROPATHOLOGY. Applications are invited from pathologists with previous medical school teaching experience for the position of director of neuropathology in the Department of Pathology at the College of Physicians and Surgeons, Columbia University. The appointment will carry a senior academic rank, depending on the candidate's previous experience. Requirements include diagnostic experience, demonstrated administrative and teaching ability, and experience in the training of house officers and fellows. A substantial record of publications is essential and applicants with research experience will be given a preference. Send curriculum vitae and names of at least three referees to: John J. Fenoglio, Jr., M.D., Department of Pathology, 630 West 168 Street, New York, N.Y. 10032. Columbia University is an Equal Opportunity Employer.

EXERCISE BIOCHEMIST/ENDOCRINOLOGIST

Assistant Professor, tenure-track, teaching/research position. Ph.D. degree required. Candidate is expected to develop an independent research program. Rank and salary based on qualifications and experience. Starting date: August 1986. Submit curriculum vitae, reprints, and three letters of recommendation to: Carl V. Gisolfi, Ph.D., Exercise Science and Physical Education Department, N420 Field House, The University of Iowa, Iowa City, Iowa 52242. Screening begins 15 January 1986. The University of Iowa is an Equal Opportunity/Affirmative Action Employer.

Unit Supervisors

Pivotal research roles in biochemical pharmacology and pharmacokinetics.

Wyeth Laboratories is a pioneer and pacesetter in pharmaceutical research and drug development/manufacturing. Now is the opportune time to join our expanding Drug Disposition Section as we intensify our drug metabolism research activities.

We offer exceptional opportunities to highly qualified Research Scientists who will study absorption, distribution, metabolism, excretion and pharmacokinetics of new drug entities in animals and man. We look to you to keep abreast of advances in your field, and to develop methods for the isolation and characterization of metabolites of new drugs from biological fluids.

You'll need a PhD in Physical or Life Sciences; broad knowledge of the theory of drug metabolism and disposition, including pharmacokinetics, clinical pharmacology, enzyme kinetics, and comparative metabolism. Also required are: technical expertise in disciplines related to your specialty; experience in state-of-the-art analytical techniques applicable to drug metabolism; and the ability to perform independent sophisticated research.

If you're ready for more professional achievement and opportunity to contribute to the decision-making process in scientific matters, join our research environment. We offer fully competitive salaries, extensive company benefits, and a distinctive work environment on our 20-acre Corporate Campus located in an attractive community on Philadelphia's prestigious Main Line. To find out more, please send your resume to: Position #WD5084S, Recruitment Manager, Wyeth Laboratories, Inc., P.O. Box 8299, Philadelphia, PA 19101. An Equal Opportunity Employer, M/F/H/V responses encouraged.

Wyeth Laboratories, Inc.

Our Pharmaceuticals Division has a vacancy for an

ELECTROPHYSIOLOGIST

This permanent position at the company headquarters in Basle, will involve leading a separate research unit (in H.R. Olpe's team). The Neuropharmacology Section is an interactive, dynamic group of scientists working in many fields of wide current interest.

We are looking for a keen, junior or senior colleague who is thoroughly familiar with intracellular recording methods and preferably also experienced in the voltage-clamp technique. A knowledge of neuropharmacology would be an advantage. The unit will be engaged in the development of new models for assessing central drug actions and the investigation of the mechanisms of action of psychotropic drugs as well as in basic research on central peptidergic transmitter substances.

The position offered carries a competitive salary. The company runs its own superannuation scheme.

Our research facilities are pleasantly situated on the Rhine embankment in Basle, which is well known as a centre of pharmacological and biological research and also caters for a wide variety of cultural interests and activities.

Applications should be addressed under reference "Science 1024" to Dr. U. Spaeti, Personnel Department, CIBA-GEIGY Ltd., Post-fach, 4002 Basel/ Switzerland.

CIBA—GEIGY

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ECOLOGY

The Department of Biological Sciences at Clemson University is seeking an ecologist for a tenure-track position at the rank of assistant or associate professor. Applicants must have the potential for developing a vigorous and productive research program in their area of interest and for maintaining outside funding. Candidates who complement departmental strengths in the areas of behavior, comparative physiology, or the marine sciences may be given preference.

Applicants should submit a letter of application, a

Applicants should submit a letter of application, a statement of current and proposed research, a current curriculum vitae, appropriate reprints, and names and telephone numbers of at least three individuals who can be contacted for recommendations. Application deadline is 1 January 1986. Address correspondence to: Dr. James E. Schindler, Chair, Ecology Search Committee, Department of Biological Sciences, Clemson University, Clemson, S.C. 29634—1903; telephone: 803-656-3594. Clemson University is an Equal Opportunity/Affirmative Action Employer.

ENZYMOLOGY

The Department of Biological Sciences at Clemson University is seeking an enzymologist for a tenure-track position at the assistant professor rank in the biochemistry program. Applicants must have the potential for developing a strong and productive research program. Experience in plant molecular biology and/or plant biochemistry is preferred.

Applicants should submit a letter of application, a

Applicants should submit a letter of application, a short statement of research interests, a current curriculum vitae, and names, addresses, and telephone numbers of at least three individuals who can be contacted for recommendations. Application deadline is 1 January 1986. Address correspondence to: J. K. Zimmerman, Chair, Enzymology Search Committee, Department of Biological Sciences, Clemson University, Clemson, S.C. 29634–1903. Clemson University is an Equal Opportunity/Affirmative Action Employer.

EPIDEMIOLOGIST AND PHYSICIAN EPIDEMIOLOGIST

Two Ph.D. level epidemiologists and one physician epidemiologist wanted for the California Birth Defects Monitoring Program (CBDMP), California State Department of Health Services. The CBDMP will be operating the largest, most comprehensive population-based registry of children with congenital malformations covering a population in urban and rural parts of California with 250,000 births annually. The jobs offer excellent independent research opportunities for those interested in cross-sectional and case control studies.

Persons with strong analytic and computer skills and/or background in embryology, genetics, dysmorphology, pediatrics, nursing, occupational, or environmental health are urged to apply.

The positions are non-civil service, not bounded by civil service salary ranges, located in Berkeley, California, and ongoing. Jobs begin between 1 January 1986 and 30 June 1986.

To apply, please submit curriculum vitae and references no later than 30 November 1985 to: John A. Harris, M.D., M.P.H., Chief, California Birth Defects Monitoring Program, 2151 Berkeley Way, Room 704, Berkeley, California 94704; telephone: 415-540-3091

GENETICIST Department of Biological Sciences University of Cincinnati

University of Cincinnati

The Department of Biological Sciences is seeking candidates for a tenure-track FACULTY POSITION at the assistant professor level in the area of GE-NETICS, beginning 1 September 1986. The candidate must have a Ph.D. or equivalent, plus postdoctoral experience. Significant research accomplishments or evidence of outstanding research potential in any field of genetics involving the use of modern technology will be the primary consideration. The successful candidate will be expected to develop an undergraduate course in genetics, a graduate course in his/her specialty, a grant-supported research program, and to participate in graduate student education. Applicants should submit curriculum vitae, a one-page statement of research interests, and have at least three letters of reference forwarded to: Dr. Ralph R. Meyer, Genetics Search Committee, Department of Biological Sciences, University of Cincinnati, Cincinnati, Ohio 45221. Deadline for application is 15 January 1986. The University of Cincinnati is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

FACULTY POSITIONS IN PHARMACOLOGY

The Department of Pharmacology of The University of Texas Health Science Center at Dallas seeks applications for tenure-track positions at the level of assistant or associate professor. Applicants must have a relevant Ph.D. or M.D. degree, postdoctoral training, and show evidence of firm commitment to a career in independent research. We are particularly interested in considering individuals with an appropriate background who wish to apply techniques of molecular or cellular biology or biochemistry to fundamental problems of pharmacological interest. Responsibilities will also include teaching of medical and/or graduate students after the first year of employment. Send curriculum vitae and a brief description of proposed research to: Dr. Alfred G. Gilman, Chairman, Department of Pharmacology, University of Texas Health Science Center at Dallas, 5323 Harry Hines Boulevard, Dallas, Tex. 75235. An Equal Opportunity/Affirmative Action Employer.

MSU-DOE PLANT RESEARCH LABORATORY Michigan State University

The Michigan State University-Department of Energy (MSU-DOE) Plant Research Laboratory has THREE TENURE-TRACK FACULTY POSITIONS available, one of which can be filled at the senior level. Applications are being sought from researchers who will be working toward the mechanistic understanding of fundamental questions in plant biology using modern experimental approaches of biochemistry, genetics, or cell and molecular biology. We encourage applications from scientists who would be moving into plant biology from other areas of biology or chemistry.

The Plant Research Laboratory is operated under a contract from the U.S. Department of Energy and provides a stimulating atmosphere and excellent facilities for research in the plant sciences. Faculty members are jointly appointed in an appropriate academic department. Research space is available in a newly completed wing of the building, and generous set-up support as well as continuing research funding will be provided.

Applicants should have postdoctoral research experience with demonstrated productivity and evidence of potential for independent research; senior applicants should have an established independent research program. In order to assure consideration, applications should be received preferably by 15 February 1986. Applicants should send curriculum vitae, description of research accomplishments and future interests, and the names of references to: Dr. Hans Kende, Director, MSU-DOE Plant Research Laboratory, Michigan State University, East Lansing, Mich. 48824. Michigan State University is an Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF CALIFORNIA DIVISION OF AGRICULTURE AND NATURAL RESOURCES COOPERATIVE EXTENSION

4-H Specialist—Program Development, Science and Technology, Career Exploration Berkeley Campus

An academic career track appointment, subject to administrative review of position and incumbent's performance prior to end of 3-year period. Provide statewide leadership in the development and maintenance of science and technology education programs for California's youth, and develop youth career exploration programs. Assist in the development of statewide policies, procedures, and programs. Assure affirmative action in development and delivery of programs. Graduate education in science education, natural science, biology, natural resources, environmental studies, home economics, or closely related field, plus experience. Salary in associate specialist rank. Contact: Cooperative Extension Personnel, University of California, Berkeley, Calif. 94720. Telephone: 415-644-4320. Closes 17 January 1986. Refer to Number A-84-223-R. Affirmative Action/Equal Opportunity Employer, MIFIH.

The University of Michigan Medical School, Department of Pediatrics, has THREE OPEN FACUL-TY POSITIONS at the instructor through professor level. Individuals should be Board-qualified, patient care, teaching, and research-oriented in fields of cardiology, ambulatory care, pulmonary, or general pediatrics. Direct inquiries to: Robert P. Kelch, M.D., Department of Pediatrics, D1109 MPB, Ann Arbor, Michigan, 48109-0010. The University of Michigan is a non-discriminatory, Affirmative Action Employer.

POSITIONS OPEN

UNIVERSITY OF MARYLAND, COLLEGE PARK Faculty Position in Biochemistry

The Department of Chemistry and Biochemistry invites applications from outstanding individuals for a tenure-track position in biochemistry, at the level assistant professor. Applicants research interests should be in the areas of nucleic acid structure and function or the use of nucleic acids to study protein structure and function. Send curriculum vitae and statement of research plans and arrange for the submission of three letters of recommendation by 15 December 1985 to: Professor John W. Kozarich, Department of Chemistry and Biochemistry, University of Maryland, College Park, Md. 20742. The University of Maryland is an Equal Opportunity/ Affirmative Action Employer.

FACULTY POSITION VACANCY PHYSIOLOGY/PATHOPHYSIOLOGY

Major responsibility for teaching human physiology and pathophysiology for allied health students with minor teaching in pharmacology. Qualifications: Ph.D., demonstrated record in research, interest in teaching, and in continuing research. Salary and rank negotiable. Send curriculum vitae and names and addresses of three references to: Dean's Office, College of Allied Health Professions, Cancer Center/Clinical Building, University of South Alabama, Mobile, Alabama 36688.

Equal Opportunity/Affirmative Action Employer

FACULTY POSITION: CELLULAR IMMUNOLOGY AND TRANSPLANTATION. Permanent-tract position for person with M.D. and/or Ph.D. Involves conducting an independent research program in cellular immunology with pertinence to transplantation. Candidate expected to be competent in cellular immunology and willing to interact with clinicians involved in a large multiorgan transplant program. Will receive academic appointment commensurate with his/her qualifications. Start-up funds for establishment of the laboratory are available. Send curriculum vitae, a brief description of research interests, and names of three references to: G. J. Gleich, M.D., Department of Immunology, Mayo Clinic, Rochester, Minn. 55905. An Equal Opportunity/Affirmative Action Institution.

FACULTY POSITION—IMMUNOLOGIST. The Department of Microbiology at Michigan State University invites applications for a tenure-track faculty position in immunology at the rank of assistant or associate professor. This is an active and diverse department, with strengths in immunology, molecular and cellular biology, virology, parasitology, and microbial ecology. Applicants should have at least 2 years of postdoctoral experience and have demonstrated research ability in modern immunology. The successful applicant will be expected to establish an independent research program, compete successfully for external funding, and participate in teaching immunology to graduate and undergraduate students. Rank and salary will be commensurate with experience. Send curriculum vitae, a statement of research plans, and three letters of recommendation to: Chair, Immunology Search Committee, Department of Microbiology, Michigan State University, East Lansing, Mich. 48824–1101. An Affirmative Action/Equal Opportunity Institution.

FACULTY POSITION IN NEUROBIOLOGY DEPARTMENT OF BIOLOGY BOSTON UNIVERSITY

The Department of Biology, Boston University, announces a tenure-track opening at the ASSIST-ANT PROFESSOR level in the area of NEUROBI-OLOGY. This appointment is part of Boston University's commitment to expand and strengthen the basic sciences. Applicants will be expected to show potential for maintaining an active, externally funded research program and be qualified to teach at the undergraduate and graduate levels, including an upper division course in NEUROPHYSIOLOGY. All outstanding candidates with research expertise in a modern neuroscience area will be considered, but preference will be given to those with broad training in biology who best complement existing neuroscience faculty and other departmental strengths. Submit curriculum vitae, reprints, statement of current and proposed research, and names of three references by 15 December to: Dr. Gloria Callard, Neuroblology Search, Department of Biology, Boston University, 2 Cummington Street, Boston, Mass. 02215.

Boston University's policies provide for Equal Opportunity and Affirmative Action in employment and admission to all programs of the university.

PRESIDENT

University Consortium

Applications and/or nominations are invited for the position of President of the Association of Universities for Research in Astronomy, Inc. (AURA). Headquartered in Washington, D.C., the 17-member university consortium manages and operates the National Optical Astronomy Observatories (Kitt Peak National Observatory, Cerro Tololo Inter-American Observatory and the National Solar Observatory) under contract with NSF, and the Space Telescope Science Institute under contract with NASA.

The President serves as chief executive officer of AURA and manages its Corporate Office. As the Board's principal staff officer, the President is the primary representative for AURA with the funding agencies, supporting operations and/or facilities construction of the Centers AURA manages, and with other governmental bodies. The President serves as an advisor to the Center Directors on matters of policy and planning, particularly with regard to the relationships with the funding agencies, or to broad AURA policies, and to assure effective coordination between the Centers. The President is responsible for maintaining effective working relationships with the presidents of the AURA member universities.

Advanced degree in astronomy or related physical science and extensive experience in management/administration in a research-oriented organization or university or government setting are required. Attractive salary and benefits package.

Applications, accompanied by a résumé and names/addresses of three professional references, or nominations with supporting statements, should be submitted no later than February 1, 1986, to:

Chairman, Search Committee AURA, Inc. Suite 820 2100 Pennsylvania Avenue, N.W. Washington, D.C. 20037

Equal Opportunity/Affirmative Action Employer

What is the Next Challenge for Biotechnology?

With GIBCO/BRL, you will be involved in the forefront of biotechnology research and development. GIBCO/BRL, a leading supplier of specialty products for biotechnology is seeking highly qualified individuals (Ph.D/M.S./B.S.) with experience in Nucleic Acid Chemistry and Hybridization Technology; Molecular Genetics, Virology and Immunology; and Cell Biology.

Your insight is needed to help identify and meet the challenges that will lead to the next generation of new products and commercial applications.

These new, professional positions offer competitive salaries and benefits with opportunities for advancement in a growing company. If you are a dedicated scientist interested in the challenges of industrial applications, please send your resume, in confidence to:

Mr. Wayne E. Fowler

GIBCO/BRL Division

Life Technologies, Inc. Dept. SR1 8717 Grovemont Circle Gaithersburg, MD 20877

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HOFFMANN-LA ROCHE

Postdoctoral Positions

Hoffmann-LaRoche, an established leader in the pharmaceutical and health care industry, has a number of postdoctoral positions available for creative individuals to carry out basic research in the Department of Pharmacology and Chemotherapy.

Cardiovascular

Electrophysiologist to establish laboratory for recording single channels plus action potential characteristics of rat myocytes and to design experiments complementing our biochemical approach to the evaluation of anoxic neonatal rat myocytes in culture. Position LK

Dermatology

Cell Biologist to establish sebaceous gland cells in culture to study mechanisms involved in the regulation of sebum production. Position SS

Inflammation

Pharmacologist/Immunologist to investigate the

mechanisms responsible for the anti-inflammatory activity of retinoids in animal models of arthritis. Position JC

Obesity

Biochemist to investigate peripheral tissue response to insulin action, and to study the regulation of insulin secretion in obese animal models. Position JT

Infectious Diseases

Microbial biochemist to explore antibiotic targets and mechanism of resistance. Position RC

Postdoctoral positions are 1 year appointments, renewable for a second year upon mutual agreement.

The Roche Research Center is located in a suburban setting 10 miles from New York City. Roche offers a very competitive compensation package and a research environment that encourages scientific growth. Interested individuals should send a curriculum vitae indicating past and current research interests, and including position of interest to: Ms. Jane Jusinski.



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FACULTY POSITIONS IN BIOLOGICAL SCIENCES Cell Biology Development Biology (Zoology) Genetic Engineering Immunology Plant Development Soil Microbiology

The Department of Biological Sciences at Texas Tech University invites applications for the above tenure-track positions. The positions are primarily at the assistant professor level, all professorial ranks will be considered. Candidates are expected to develop independent research programs in their field of expertise, demonstrate a strong commitment to obtaining extramural grant support, and participate in departmental graduate and undergraduate teaching pro-grams. All candidates must possess a Ph.D., and at least 1 year of postdoctoral training is highly preferred. Candidates for the cell biol-ogy position will be expected to participate in the human anatomy and physiology teach-ing program. Texas Tech University is one of four major multipurpose state universities in Texas. The department consists of 30 full-time faculty with research emphasis in the areas of cell and molecular biology, microbiology, developmental biology, biotechnology, and evolutionary biology. Several of the faculty participate in joint research projects with the School of Medicine, the College of Agriculture, and the Musuem. All candidates should submit curriculum vitae, copies of recent publications, a description of research plans, and three letters of recommendation to: Dr. John M. Burns, Chairman of Search Coordinating Committee, Department of Biological Sciences, P.O. Box 4149, Texas Tech University, Lubbock, Texas 79409. Deadline for applications is 31 December 1985. four major multipurpose state universities

Texas Tech University is an Affirmative Action/Equal Opportunity Employer.

CHAIRMAN CHAIRMAN DEPARTMENT OF BIOMEDICAL SCIENCES ONTARIO VETERINARY COLLEGE UNIVERSITY OF GUELPH

Applications and nominations are invited for the above position, which is now vacant. The department embraces the disciplines of morphological science, physiology, medical biochemistry and biotechnology, pharmacology, and toxicology. It is responsible for preclinical instruction within the D.V.M. Program, as well as providing distributions. preclinical instruction within the D.V.M.
Program, as well as providing disciplinary courses in anatomy, physiology, pharmacology, and toxicology to science students and for graduate training. It has a complement of 29 faculty members.

Applicants should have a D.V.M. or related background, plus an advanced degree at the doctoral level in one of the above disciplines and have an excellent record of scholar-ships, teaching, and research. Administra-tive experience would normally be required. The successful applicant will be given an academic appointment within the department at a rank commensurate with his/her experience and qualifications. The administrative position of chairman will be for a 5-year term and is renewable.

In accordance with Canadian immigration in accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. Applications and nominations will be accepted until 15 December 1985, or until the position is filled, and should be submitted to:

Dean Ontario Veterinary College University of Guelph Guelph, Ontario Canada N1G 2W1

Position subject to final budgetary approval.

POSITIONS OPEN

The Departments of Geology and Biology invite well-qualified applicants for a 1-year, temporary, interdepartmental FACULTY POSITION, beginning interdepartmental FACULTY POSITION, beginning fall 1986. The applicant must have an earned Ph.D. in the biological sciences, research experience in environmental biology, and 5 years of teaching and administrative experience in interdisciplinary, lower-division, general science courses. Responsibilities will include teaching and coordinating a multidisciplinary (biological and physical sciences), teamtaught, general education science course (Geology Department) and teaching upper-division fisheries management and environmental biology (Biology management and environmental biology (Biology Department). Applicants should submit a résumé, all college transcripts, and names of three references before 17 December 1985 to: Dr. Marshall E. Maddock, Chairman, Search Committee, Department of Geology, San Jose State University, San Jose, Calif. 95192-0102. An Equal Opportunity/Affirmative Action Employer.

HEAD, DIVISION OF SCIENCE

Search committee seeks a division head for the Division of Science at Northeast Missouri State University (NMSU). NMSU is recognized nationally for its award-winning Value-Added Model of Assessment and has been designated as Missouri's premier liberal arts and sciences university.

The Sciences Division is one of 13 academic divisions and serves approximately 800 majors with 44 full-time faculty members representing the following disciplines: biology, chemistry, physics, agri-culture, animal health technology, and science edu-cation. Master's programs are offered in biology and science education.

Applicants must have an earned doctorate in a science field with an outstanding academic record and demonstrated scholarship. Candidates with skills in leadership, administration, curriculum development, research, and grantsmanship are desired. Salary is negotiable based on qualifications

and experience.
Please forward letter of application, curriculum rlease forward letter of application, curriculum vitae, academic transcripts (undergraduate and graduate), and three letters of reference to: Dr. Gary Sells, Search Committee, Division of Science, Northeast Missouri State University, Kirksville, Mo. 63501.

Application deadline is 15 January 1986, or until position is filled. NMSU is an Equal Opportunity Employer.

Northeast Missouri State University Value Added to Your Future

IMMUNOLOGIST.Recent Ph.D. with postdoctoral experience to work in vitro on mechanisms of lymphokine-induced regressions of human malignant phokine-induced regressions of human malignant melanoma. Experience with lymphokines, cytotoxicity assays, fluorescence microscopy, and tissue culture desirable. Applicants should be informed and innovative, as well as technically skilled. Position available immediately. Send curriculum vitae and names of three references to: Dr. Fred T. Valentine, New York University Medical Center, 550 First Avenue, New York, N.Y. 10016.

Ph.D. IMMUNOLOGIST with research experience in monoclonal antibodies, electrophoresis, and ELISA techniques. Research project in human diagnosis. Send curriculum vitae to:

Dr. J. Hartman
Department of Biological Sciences
Florida Atlantic University
Boca Raton, Fla. 33431

MOLECULAR BIOLOGIST. The Department of Biology at California State University, Los Angeles, is accepting applications for a tenure-track faculty shology at California State University, Los Angeles, Edual opportunity/Affirmative Action/Handicapped/Employer.

POSITIONS OPEN

THE UNIVERSITY OF CALGARY FACULTY POSITION IN MOLECULAR NEUROBIOLOGY

The Neuroscience Research Group invites applications for a faculty position in the Department of Medical Biochemistry at The University of Calgary. This position will be at the rank of assistant or associate professor, depending on experience and qualifications. Applicants must have a Ph.D. and a minimum of 2 years of postdoctoral research experience. Opportunity exists for interaction with neurobiologists and molecular biologists on the staff at The University of Calgary. Salary and establishment grants for the position are available on a competitive basis from the Alberta Heritage Foundation for Medical Research. The successful applicant will have 75 percent of his/her time protected for re-

The Neuroscience Research Group is particularly interested in identifying candidates using modern techniques of molecular biology to study (i) the regulation of gene expression during neural differen-tiation or (ii) structure-function relationships of macromolecules important to excitable tissues. Deadline for the receipt of applications is 1 January 1986.

All qualified individuals are encouraged to apply, but preference will be given to Canadian citizens and permanent residents.

Applicants should forward curriculum vitae, names of three referees, selected reprints, and a description of future research goals to:

Molecular Neurobiology Search Committee
Faculty of Medicine
The University of Calgary
3330 Hospital Drive NW
Calgary, Alberta Canada T2N 4N1

IMMUNOLOGIST

The Yale University School of Medicine is accepting applications for a position as head of a Section of Immunobiology with the rank of professor. Candidates must be internationally recognized as leaders in the field of molecular/cellular immunology with a in the field of molecular/cellular immunology with a strong, currently active, and well-funded research program. In addition, candidates should have the requisites of commitment, expertise, and skills for building a leading group of independent investigators in the field of immunology and for interacting with other relevant research groups at the institution. Send curriculum vitae prior to 14 December 1985 to: Dr. Sherman M. Weissman, Yale University School of Medicine Department of Human Corporites 232 Code Medicine, Department of Human Genetics, 333 Cedar Street, P.O. Box 3333, New Haven, Conn. 06510. An Equal Opportunity/Affirmative Action Employer.

Junior faculty position for a Ph.D. WITH RECENT POSTDOCTORAL TRAINING IN THE AREA OF MEMBRANE TRANSPORT. Strong background in membrane transport is essential; experience with isolation and characterization of transport proteins or with regulatory mechanisms such as membrane phosphorylation highly desirable. The successful candidate will hold a tenure-track appointment for phosphorylation highly desirable. The successful candidate will hold a tenure-track appointment (assistant professor) in the Department of Pediatrics. Half of the candidate's time will be spent in collaboration with ongoing NIH-supported research which focuses on the ontogeny of transport mechanisms in intestinal and hepatic plasma membranes. The remaining time will be devoted to establishing and maintaining an independent research program related to the primary interests of the laboratory. Applimaintaining an independent research program related to the primary interests of the laboratory. Applicants should forward curriculum vitae and the names of three individuals who may supply letters of reference to: Frederick J. Suchy, M.D., Division of Gastroenterology and Nutrition, Children's Hospital Research Foundation, Cincinnati, Ohio 45229. An Equal Opportunity Employer, MIF.

MARINE SCIENTIST. Williams College invites ap-MARINE SCIENTIST. Williams College invites applications for 2-year renewable position beginning July 1986 teaching oceanography and marine ecology in American Maritime Studies program at Mystic Seaport Museum to undergraduates from liberal arts colleges. Coastal environment, marine laboratory, and offshore research. Qualifications: Ph.D., teaching experience, active research interests, commitment to liberal arts; postdoctoral experience preferred. Send curriculum vitae, names of three references, and covering letter before 20 December to: ences, and covering letter before 20 December to: Benjamin W. Labaree, Director, Williams-Mystic Program, Mystic Seaport Museum, Mystic, Conn. 06355. An Affirmative Action/Equal Opportunity Employer.

SEARCH REOPENED DEPARTMENT HEAD MOLECULAR AND CELLULAR BIOLOGY

The University of Arizona invites nominations and applications for the position of department head of a new and growing Department of Molecular and Cellular Biology. A scientist of prominence is sought to lead in the development of molecular, cellular, and developmental biology at Arizona. A significant number of tenure-track positions will be available to this department over the next few years and a new building is being planned to support this development.

The University of Arizona is currently engaged in strengthening a number of units as part of the Biological Sciences Reorganization. Significant opportunities will exist to participate in this process which aims for excellence in the undergraduate and graduate programs.

Applications and correspondence should be addressed to: Dr. John H. Law, Chairman, Department Head Search Committee, Department of Biochemistry, University of Arizona, Tucson, Ariz. 85721. Closing date for applications is 15 January 1986.

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

LABORATORY DIRECTOR

Intellectually challenging stable academic research position with both long-term career and leadership capacity potential. A typically qualified candidate should hold the Ph.D. degree (American or United Kingdom school), having had at least one (preferably more) postdoctoral experience. Background in cell biology and/or biochemistry needed with experience in applied immunochemistry and related protein characterization techniques. Work at present entails the above, plus protein-lipid interactions. Salary and fringe benefits competitive. Equal Opportunity Employer. Send curriculum vitae and references to:

G. I. Research Unit Cleveland Clinic Foundation 9500 Euclid Avenue Cleveland, Ohio 44106

POSITIONS OPEN

IMMUNOPATHOLOGY

University of California, San Francisco (UCSF), School of Dentistry, seeks applications and nominations for a position in the Division of Oral Biology at the level of assistant or associate professor in residence commencing 1 July 1986. Applicants should have a D.D.S., M.D., Ph.D., or equivalent degree with training and experience in immunopathology. Preference will be given to those with an active research program dealing with autoimmunity of mucosa, skin, and exocrine/endocrine glands and who show evidence of demonstrated ability to successfully compete for research funds. Responsibilities will include teaching immunology and immunopathology to predoctoral dental, dental hygiene, graduate, and postdoctoral professional students. Salary commensurate with experience.

Send curriculum vitae to: Dr. John S. Greenspan, Division of Oral Biology, Room 604 HSW, University of California, San Francisco, Calif. 94143. Deadline: 15 December 1985. UCSF is an Equal Opportunity/Affirmative Action Employer.

The Division of Viral Diseases, Centers for Disease Control (CDC), Atlanta, Georgia, invites applications for a MEDICAL EPIDEMIOLOGIST position to participate in the influenza program. Responsibilities of the position will include organization of investigations into the occurrence and control of influenza in high-risk persons with an emphasis on nursing-home residents. Desired qualifications, in addition to epidemiologic training, include Board eligibility in internal medicine, specialty training in infectious disease, and experience studying infections of geriatric patients, particularly in chronic-care facilities. Salary range is from approximately \$31,619 to \$37,599, depending on experience. Submit curriculum vitae and names of three references or Louise Griggs, Personnel Management Office, Centers for Disease Control, Atlanta, Ga. 30333; for technical questions, contact: Dr. Alan Kendal, Chief, Influenza Branch, Centers for Disease Control, Atlanta, Ga. 30333. Telephone number 404-329-3591. CDC is an Equal Opportunity Employer. Applications must be received within 3 weeks of publication date.

POSITIONS OPEN

The Division of Viral Diseases of the Centers for Disease Control (CDC) is actively recruiting a LAB-ORATORY CHIEF for the Retrovirus Branch. This branch works in close cooperation with the AIDS Epidemiology Branch in CDC's research program leading to the diagnosis, prevention, and control of AIDS. This laboratory is responsible for an active research program on the physiochemical, immunologic, genetic, pathogenic, and host cell-virus interactions of human T-lymphotrophic virus-III/Mphadenopathy-associated virus (HTLV-III/LAV) and related retroviruses. The laboratory is very well equipped, has a staff of approximately 25 people (virologists, molecular virologists, immunologists, immunochemists, technical, and clerical support), and a potential for growth. Applicants must have a strong research background in virology, preferably in retrovirology and/or molecular virology. Proven leadership and management ability are also required. A Ph.D. or M.D. is preferred. Current salary range is from \$52,262 to \$68,700 with an attractive fringe benefit package. Send curriculum vitae, a brief summary of past and present professional activities, and names of three references by 14 December 1985 to: William R. Hudson, Personnel Office, Centers for Disease Control, Atlanta, Ga. 30333, telephone: 404-329-3625. For additional information regarding this position, telephone: Dr. Frederick A. Murphy, Director, Viral Diseases Division, Center for Infectious Diseases, Centers for Disease Control, telephone: 404-329-3574. The Centers for Disease Control is an Equal Opportunity Employer.

Experienced Ph.D. NEUROPHARMACOLOGIST needed for brain trauma laboratory. U.S. government contract approved for 5 years. Areas of study will include post injury behavior, modification by specific drug therapy; neurochemical and neurotransmitter alterations following injury (peripheral and central) both acute and chronic. HPLC experience necessary. Brain receptor-binding experience desirable. Salary starts mid-\$30,000's. Send curriculum vitae and two references: Michael E. Carey, M.D., Department of Neurosurgery, Louisiana State University Medical Center (LSUMC), 1542 Tulane Avenue, New Orleans, La. 70112. LSUMC is an Equal Opportunity/Affirmative Action Employer.

SCIENCE, ENGINEERING AND DIPLOMACY FELLOWSHIP Applications Invited

The American Association for the Advancement of Science (AAAS), in cooperation with the Agency for International Development (AID) and the Department of State (STATE), is seeking applicants for two or more Science, Engineering and Diplomacy Fellowships. Fellows will spend 1 year, beginning 1 September 1986, working either in the Bureau of Oceans and International Environmental and Scientific Affairs of the Department of State or in one of the bureaus of the Agency for International Development. Other assignments may also be possible.

Prospective fellows must demonstrate exceptional competence in some area of science or engineering, be flexible, have some experience and/or a strong interest in applying knowledge toward the solution of problems in the area of foreign affairs, and have a Ph.D. or equivalent in years of experience. Awardees will work on scientific and technical subjects in international affairs: foreign policy for STATE and international development for AID. In general, individuals are urged to apply from any area of physical, biological, behavioral, and social science and engineering and whose experience and training is applicable to any one of the following areas: food and agriculture; health and population; nuclear nonproliferation; scientific exchange; forestry, natural resources and ecology; oceans and fisheries; communications; national security; and nutrition, among others.

The fellows will serve a 1-year appointment at a salary consistent with education level and experience, if possible, but not exceeding, in the case of STATE, the GS-12 level (beginning at \$31,600). A security clearance process will be initiated after selection. The clearance must be obtained before a selectee can begin work in the State Department or AID, and the fellowship award is contingent upon the selectee obtaining this clearance.

Deadline for receipt of applications is 15 January 1986. For more information and application details, write:

Science, Engineering and Diplomacy Fellows Program American Association for the Advancement of Science 1333 H Street, NW Washington, D.C. 20005

CONGRESSIONAL SCIENCE AND ENGINEERING FELLOWSHIPS

Applications Invited

The American Association for the Advancement of Science (AAAS) invites application for two 1-year Congressional Science and Engineering Fellowships it will offer for the period beginning 1 September 1986. The Fellowship Program provides an opportunity for accomplished and societally aware postdoctoral to mid-career scientists and engineers to participate in and contribute to the public policy-making processes within the Congress for approximately 1 year. Fellows work as special legislative assistants within the congressional staff system.

Persons may apply from any physical, biological, or behavioral science or any field of engineering. The term "science" is used broadly to include the system sciences, public health, and other technical professions. In addition to the fellowships awarded by the AAAS, about 25 others are given by other participating professional societies. The AAAS runs a year-long educational program for the set of Congressional Science and Engineering Fellows. Addresses of all participating societies are available from the address listed below.

The 1986–1987 AAAS Congressional Science and Engineering Fellows will receive a stipend of \$26,500; an additional \$1,500 is available for relocation expenses and travel in connection with the Program.

In order to obtain detailed information on the program and specific application requirements, write:

Congressional Science and Engineering Fellows Program American Association for the Advancement of Science 1333 H Street, NW Washington, D.C. 20005

The deadline for application is 15 January 1986. The award will be announced around 1 May 1986.

Biogen, an international biotechnology company engaged in the development of heath care products, is seeking a candidate for the following position in our Cambridge laboratories.

PROTEIN CHEMIST

Process Development

This position offers the unique opportunity to work as a member of a multidisciplinary team involved with the design and implementation of large scale processes for the isolation of protein products using recombinant DNA technology.

The successful candidate will have a Ph.D. and research experience in protein chemistry. Post doctoral or work experience in the field of protein purification would be advantageous.

Biogen offers and excellent compensation and benefits package (including relocation benefits). Interested candidates should forward their resume to: Manager of Human Resources, Biogen, Dept. PC-27, 14 Cambridge Center, Cambridge, MA 02142. An equal opportunity employer.





CHOLESTEROL METABOLISM

E.R. Squibb & Sons is a world leader in developing novel approaches for treating cardiovascular disease. We have recently expanded our interest in the cardiovascular area to include hyperlipidemia and related diseases. As a result, a number of excellent opportunities are available for Biochemists, Cell Biologists and Molecular Biologists.

Candidates should possess a Ph.D. or M.D. with postdoctoral experience in one of the following areas:

- 1. Enzymology and isolation of membrane-bound enzymes
- 2. Regulatory mechanisms affecting lipoprotein receptor expression or cholesterol synthesis
- 3. Cloning and expression of mammalian genes

These positions demand a creative approach to the study of cholesterol metabolism and an interest in the development of anti-hypercholesterolemic drugs.

The Squibb Institute, located in Princeton, N.J., offers the opportunity for exceptional scientists to pursue stimulating careers. Our location is a pleasant semi-rural setting convenient to both Philadelphia and New York

Resumes should be directed to: The Squibb Institute for Medical Research, Department KC/CM, P.O. Box 4000, Princeton, NJ 08540. Equal Opportunity Employer, M/F/H/V.

POSITIONS OPEN

THE UNIVERSITY OF MELBOURNE LECTURESHIP (LIMITED TENURE) IN NEUROSCIENCE in the DEPARTMENT OF ANATOMY

Applications are invited for the above position. Facilities are available for research into neural processes mediating sensorimotor function in the primate, and in vertebrate developmental neurobiology: these include a primate breeding colony, a VAX 11/730 laboratory computer system, electrophysiological and electron microscopy laboratories. Teaching commitments will be mainly in neuroscience courses for medical and science students.

Salary A\$26,236 to A\$34,467 per annum, with a preclinical loading of A\$4,919 for medical graduates. Initially tenure will be limited to a period of 2 years. Further details may be obtained from: Professor Ian Darian-Smith, telephone: (03) 344 5805 (Australia.)

Applications, in duplicate, including names and addresses of at least three referees and quoting position number L516 0210 should be addressed to: The Staff Officer, University of Melbourne, Parkville, Victoria 3052, Australia, and close on 18 December 1985

MESOSCALE METEOROLOGY/UNIVERSITY OF MICHIGAN. The Department of Atmospheric and Oceanic Science invites applications for a tenure-track faculty position with a preference in mesoscale meteorology, although qualified candidates in related areas will be considered. The successful candidate will be expected to participate in the instructional program at the graduate and undergraduate levels and carry out an active research program. Faculty rank and salary will be commensurate with qualifications. Send résumé, a list of three or more references, and any other relevant information to: Professor S. R. Drayson, Mesoscale Search Committee, Department of Atmospheric and Oceanic Science, 2455 Hayward, Ann Arbor, Mich. 48109–2143. The University of Michigan is a non-discriminatory/Affirmative Action Employer.

MOLECULAR BIOLOGISTS: Doctoral department of 30 faculty and 80 graduate students, committed to a quality research program, anticipates two tenure track positions at the assistant/associate professor levels. The positions, to begin August 1986, are for a PLANT MOLECULAR BIOLOGIST/BIOTECHNOLOGIST and a MICROBIOLOGIST with molecular interests. Postdoctoral experience in an allied area preferred. Appointees expected to establish funded research programs, supervise graduate research, and teach. Send résumé, reprints, research plan, and four letters of reference by 20 December 1985 to: Reginald Noble, Chair, Department of Biological Sciences, Bowling Green State University, Bowling Green, Ohio 43403. An Equal Opportunity/Affirmative Action Employer.

MOLECULAR GENETICS OF BACTERIAL PATHOGENESIS

The University of Massachusetts Medical School announces the availability of a tenure-track position at the assistant professor level for a molecular biologist studying the mechanisms of bacterial pathogenesis. Applicants should send curriculum vitae, a short statement of current and proposed research, and the names of three references to:

Search Committee, Molecular Genetics and Microbiology Department, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, Mass.

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

REMOTE SENSING/UNIVERSITY OF MICHIGAN. The Department of Atmospheric and Oceanic Science at the University of Michigan invites applications for a tenure-track faculty position. The ideal candidate would be a specialist in air-sea interaction with experimental interest in remote sensing. Outstanding candidates with a specialty in remote sensing of aquatic systems are encouraged to apply. The successful candidate will be expected to participate in the instructional program at the graduate and undergraduate levels and carry out an active research program. Faculty rank and salary will be commensurate with qualifications. Send résumé, a list of three or more references, and any other relevant information to: G. R. Carignan, Associate Chairman, Department of Atmospheric and Oceanic Science, 2455 Hayward, North Campus, Ann Arbor, Mich. 48109-2143. The University of Michigan is a nondiscriminatory/Affirmative Action Employer.



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THE UNIVERSITY OF TULSA FACULTY OF BIOLOGICAL SCIENCE MOLECULAR GENETICS or IMMUNOLOGY

Applications are invited for a tenure-track posi tion at the assistant or associate professor level beginning fall 1986. Expertise in recombinant DNA and/or monoclonal antibodies is essential. Salary is and/or monoclonal antibodies is essential. Salary is highly competitive and significant start-up funds for research equipment are available. A commitment to excellence in teaching and research is stressed. The university, with an enrollment of 5500 students, has a strong liberal arts tradition and an endowment ranked in the top 30 nationally. The Faculty of Biological Science presently consists of 13 members providing B.S. and M.S. degrees, with plans to establish a Ph. D. program in the near future. Adproviding B.S. and M.S. degrees, with plans to establish a Ph.D. program in the near future. Address complete application, including three letters of reference to: Dr. K. R. Brasch, Faculty of Biological Science, The University of Tulsa, Tulsa, Oklahoma 74104. The University of Tulsa is an Equal Opportunity/Affirmative Action Employer.

MOLECULAR PARASITOLOGIST

MOLECULAR PARASITOLOGIST

Southern Methodist University (SMU) invites applications for a tenure-track assistant professorship in the Department of Biology starting 20 August 1986. Preference will be given to individuals with training and experience at the postdoctoral level. Candidates will be expected to develop a vigorous research program and to teach at the undergraduate and graduate levels. Applications, including an outline of research plans and the names of three references, should be submitted to: P. Dennis Smith, Molecular Parasitology Committee, Department of Biology, Southern Methodist University, Dallas, Tex. 75275. Review of candidates will begin 30 November 1985. SMU is an Equal Opportunity/Affirmative Action/Title IX Employer.

The Department of Biology is seeking a PHYSIO-LOGICAL PLANT ECOLOGIST whose research deals with plant-herbivore interactions; tenure-track position at assistant professor level, pending budget-ary approval. Applicants should have strong background in botanical sciences, and must provide evidence of commitment to excellence in teaching and research. Ph.D. required; postdoctoral experi-ence desired. Successful applicant expected to de-velop a program of research competitive for extramural funding, preferably involving plants and herbi-vores of the Southwest. Teaching responsibilities include introductory botany for majors, possible involvement in physiological ecology course for new graduate students in ecology and evolutionary biology, and advanced course in applicant's area of expertise. Applications should include curriculum vitae, statements of research and teaching interests, reprints/preprints, and four letters of reference to be sent separately by 1 February 1986 to: Dr. Eric C. Toolson, Department of Biology, The University of New Mexico, Albuquerque, N.M. 87131. Affirmative Action/Equal Opportunity Employer.

PLANT BIOLOGIST. A tenure-track position as assistant professor beginning fall 1986. A broadly trained Ph.D. botanist with interests in cellular/molecular biology or physiology is being sought. The successful applicant will be expected to develop an advanced molecular biology or cell biology/physiology course, share responsibility for the core cell biology course, and develop a research program. Salary commensurate with experience. Send curriculum vitae, a statement of research interests, and three letters of reference by 1 January 1986 to: Dr. Alan R. White, Chair of Search Committee, Department of Biological Sciences, Marshall University, Huntington, W.Va. 25701. Marshall University is an Equal Opportunity/Affirmative Action Employer and invites and encourages applications from minorities and women.

YEAST MOLECULAR GENETICS

Southern Methodist University (SMU) invites appli-Southern Methodist University (SMU) invites applications for a tenure-track assistant professorship in the Department of Biology starting 20 August 1986. Preference will be given to individuals with training and experience at the postdoctoral level. Candidates will be expected to develop a vigorous research program and to teach at the undergraduate and graduate levels. Applications, including an outline of research plans and the names of three references, should be submitted to: P. Dennis Smith, Chairman, Yeast Molecular Genetics Committee, Department of Biology, Southern Methodist University, Dallas, Tex. 75275. Review of candidates will begin 30 November 1985. SMU is an Equal Opportunity/Affirmative Action/Title IX Employer.

POSITIONS OPEN

NEUROBIOLOGIST. The Department of Biology at the University of Virginia invites applications for a tenure-track position at the assistant professor level. Applicants should present evidence of a strong research background in neurobiology. We are especially interested in the areas of molecular, cellular, developmental, or behavioral neurobiology. The successful candidate will be expected to develop an independent research program and to participate in independent research program and to participate in both undergraduate and graduate teaching. Senior both undergraduate and graduate teaching. Senior neurobiologists with exceptional qualifications will be considered for appointment at an appropriate level. Applications and three letters of reference should reach the Search Committee by 1 January 1986. Apply to: Professor O. L. Miller, Jr., Chairman, Neurobiology Search Committee, Department of Biology. Luiversity of Virging. Check teachile. Biology, University of Virginia, Charlottesville, Va. 22901. An Affirmative Action/Equal Opportunity

Experienced Ph.D. NEUROPHYSIOLOGIST needed for brain trauma laboratory. U.S. government contract approved for 5 years. Areas of study will include general physiologic response, brain metabolism, BBB permeability, and rCBF after injury plus specific drug therapies. Autoradiography, HPLC experience particularly desirable. Salary starts mid-\$30,000's. Send curriculum vitae and two references to: Michael E. Carey, M.D., Department of Neurosurgery, Louisiana State University (LSU) Medical Center, 1542 Tulane Avenue, New Orleans, La. 70112. LSU is an Equal Opportunity/Affirmative Action Employer.

OCEANOGRAPHER/CHEMIST—National Oceanic and Atmospheric Administration's (NOAA) Atlantic Oceanographic and Meterological Laboratory in Miami, Florida, is engaged in various research productions of the control of the c grams involving the ocean and atmosphere which require the application of leading-edge analytical chemistry. Positions are open at the GS-12 level for chemists or oceanographers who have the capability chemists or oceanographers who have the capability to develop analytical methods in chemistry for application in these research programs. Currently the starting salary for these positions will be at about \$31,619. For further information on this position, contact: Dr. Donald K. Atwood, NOAA/AOML, 4301 Rickenbacker Causeway, Miami, Fla. 33149; telephone: 305-361-4380. Information as to how to apply for these positions may be obtained from: The Personnel Division, U.S. Department of Commerce, Central Administrative Support Center, 601 East 12 Central Administrative Support Center, 601 East 12 Street, Kansas City, Mo. 64106; telephone: 816-374-5016. An Equal Opportunity Employer

PLANT ECÓLOGIST ASSISTANT or ASSOCIATE PROFESSOR

The Division of Biology at Kansas State Universithe Division of Biology at Kansas State University (KSU) has a tenure-earning position available at the assistant or associate professor level effective 1 September 1986. Although broadly defined, we particularly are interested in individuals with postdocticularly are interested in individuals with postdoctoral experience and an ability to take advantage of grassland research opportunities on our 3487-hectare Konza Prairie Research Natural Area. Candidates at the associate professor level should have evidence of an independent and productive research career. The successful applicant will be expected to establish a vigorous research program and to participate the control of establish a vigorous research program and to participate in undergraduate and graduate teaching. Candidates should apply by 31 December 1985 by submitting curriculum vitae and a brief description of future research plans, and by having three letters of reference sent to:

Terry C. Johnson, Director Division of Biology, Ackert Hall Kansas State University Manhattan, Kans. 66506

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POSTDOCTORAL FELLOW/RESEARCH ASSO-POSTDOCTORAL FELLOW/RESEARCH ASSO-CIATE (with potential for further advancement) to perform research on the regulation of hematopoiesis, developmentally regulated surface markers on normal and neoplastic hematopoietic cells, autologous bone marrow transplantation, and dye-mediated photosensitization. Ph.D. or equivalent degree required; background in cell biology, membrane biochemistry, and/or immunology desirable. Available immediately. Salary commensurate with qualifications and experience. Send résumé with the names and addresses of three references to: Dr. Fritz Sieber, Midwest Children's Cancer Center, Department of Pediatrics, Medical College of Wisconsin, P.O. Box 1997, Milwaukee, Wis. 53201.

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POSITIONS OPEN

NMR POSITIONS

A center for biomedical NMR is being established by Carnegie-Mellon University (CMU) and the Uni-versity of Pittsburgh (Pitt). It will have a 4.2 T NMR system with a 40-centimeter bore size for multinu-clear NMR imaging and in vivo spectroscopic stud-ies using animal models. We have openings for the positions of operations manager electropics engiies using animal models. We have openings for the positions of operations manager, electronics engineer, and research scientist. The operations manager should have a Ph.D. degree in physics or chemistry, or the equivalent experience with managerial skill to direct the day-to-day operation of the facility and with knowledge of NMR theory and techniques and their application to biomedical sciences. The electronics engineer should have a knowledge of NMR electronics and RF technology and some knowledge of computers. The research scientist should have a Ph.D. degree in biochemistry, chemistry, or physiology, have a knowledge and interest in try, or physiology, have a knowledge and interest in applications of NMR imaging and in vivo NMR to applications of NMR imaging and in vivo NMR to biological problems, and/or have training in metabolic and physiological studies of cells and organs of animals. He/she will have to assist users of the NMR facility in addition to carrying out his/her own research projects. These are staff appointments and salaries depend on experience and qualification. Interested persons should send curriculum vitae and the names of two to three references to: Dr. Chien Ho, Department of Biological Sciences, Carnegie-Mellon University, 4400 Fifth Avenue, Pittsburgh, Pa. 15213. CMU and Pitt are Affirmative Action/Equal Opportunity Employers. Opportunity Employers.

PALEONTOLOGY University of California, Santa Barbara

The Department of Geological Sciences invites ap-The Department of Geological Sciences invites applications for a tenure-track position in paleontology; assistant professor level preferred; salary and rank 'dependent on qualifications. Exceptionally well-qualified persons whose background and experience warrant a senior or a tenure appointment are also encouraged to apply. Preference will be given to applicants with strong research interests in such paleobiological areas as paleoecology, biomechanics, or evolution. Experience in stratigraphy and field geology will be taken into consideration.

Primary criteria for a successful applicant include the demonstration of excellence in independent research and a strong commitment to undergraduate and graduate instruction. The appointment will be effective 1 July 1986 or later as negotiated; Ph.D. required. Send a detailed résumé with a statement of research interests and aims, and names and addresses of three references by 31 December 1985 to:

Dr. Arthur G. Sylvester, Chairman Department of Geological Sciences University of California Santa Barbara, California 93106

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

PLANT MOLECULAR BIOLOGIST/PHYSIOLOGIST

BIOLOGIST/PHYSIOLOGIST

The Department of Plant Pathology, Physiology and Weed Science, Virginia Polytechnic Institute and State University (VPI&SU), seeks a plant molecular biologist/physiologist. Areas of interest are: introducing genetic material into plant cells, studies of basic physiology, studies of plant stress including plant disease, studies of genetic basis of phytopathogenicity, or studies of molecular aspects of weed science. A Ph.D. and postdoctoral experience in plant physiology, plant pathology, molecular biology, biochemistry, weed science, or related fields is desired. This is a tenure-track, 12-month appointment, 85 percent research and 15 percent teaching. Send by 31 January 1986 a statement of research interests, résumé, transcripts, and three letters of recommendation to: Dr. L. D. Moore, Head, Department of Plant Pathology, Physiology and Weed Science, Virginia Polytechnic Institute and State University, Blacksburg, Va. 24061.

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POSTDOCTORAL FELLOW RESEARCH ASSOCIATE

A funded position is available to study the molecular mechanism of genetic recombination in bacteria and yeast. Applicants experienced in microbial genetics or protein-nucleic acid biochemistry preferred. Send curriculum vitae, names of three references, and a summary of recent research activities to: Dr. Gerald R. Smith, HUTCHINSON CANCER RESEARCH CENTER, 1124 Columbia Street, Seattle, Washington

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Responsible for establishing a basic research program for the isolation and sequencing of new hormones of pharmaceutical interest. Staff Researcher requires a PhD in Biochemistry or Bio-organic Chemistry and 2-5 years' post-doctoral experience. Familiarity with protein purification techniques (e.g. HPLC, electrophoresis, etc.), and automatic protein sequencer experience is essential (gas phase sequencer preferred). Chemist/Biologist candidates must have 1-2 years' general biochemical experience such as work with tissue cultures, protein purification, radiolabeled compounds, and analytical electrophoresis.

Staff Researcher/ Immunochemist

Responsible for initiating *in vitro* and *in vivo* studies on the molecular mechanisms responsible for chronic inflammation and tissue destruction, with emphasis on cell antibody and complement interactions. Duties will also include *in vivo* evaluation of agents for the treatment of arthritis and autoimmune disorders. You should possess a PhD in Immunochemistry/Immunology with training in Pharmacology and/or Enzymology and 2-5 years' immunochemistry experience working with autoantibodies in chronic disease models *in vitro* and *in vivo*. Experience with cellular and molecular mechanisms of inflammation is desirable.

To apply, send resume and salary history to Syntex, Professional Employment, Department PS, 3401 Hillview Avenue, Palo Alto, CA 94304. We are an equal opportunity employer.



Research Scientists DNA Hybridization

Becton Dickinson and Company, a Fortune 500 industry leader in the development and manufacture of healthcare products, has an immediate need for innovative scientists to develop nucleic acid hybridization diagnostics and non-isotopic methods development.

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- Modification of nucleic acids
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Your accomplishments will be rewarded by excellent salaries, comprehensive benefits and the personal and professional satisfaction of contributing to a dynamic organization. Please send your resume and salary history, indicating position of interest, in confidence to: Mr. F. Richard Wilson, Manager, Human Resources, Becton Dickinson Research Center, P.O. Box 12016, Research Triangle Park, NC 27709. An equal opportunity/affirmative action employer. No agencies please.

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Applicants must have a Ph.D. in Cell Biology and Genetics with postdoctoral experience in Cell and Molecular Biology. The candidate must be able to conduct an original and effective research program in Cell and Molecular Biology aimed at understanding membrane protein assembly and the regulation of cell-to-cell interaction. The candidate's research must compliment existing research programs in developmental biology, molecular genetics and biochemistry. Demonstrated proficiencies in immunocytochemistry, electron microscopy, cell culture, production and characterization of mono- and polyconal antibodies, protein analysis and purification, subcellular fractionization and techniques of molecular genetics will be strong assets. Annual salary is \$38,700. Qualified applicants should send curriculum vitae, reprints, the names of three professional references and other relevant material to

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POSITIONS OPEN

PEDIATRIC PATHOLOGIST/ELECTRON MICROSCOPIST. The Anatomic Pathology Division, Department of Laboratories, Children's Hospital of Los Angeles (CHLA), an affiliated Hospital of the University of Southern California School of Medicine, is seeking a pediatric pathologist (M.D.) with electron microscopy experience, to head its Electron Microscopy Section. Experience with both TEM and SEM preferred. AP certification and eligibility for California medical license necessary. Position involves diagnostic TEM (emphases on kidney, muscle, ciliary and storage diseases, tumors), conduct of research, supervision of EM support of research of other AP faculty and trainees and of clinical programs, and fraction of time in other anatomic pathology functions. Qualification by background and publications for tenure-track in faculty of University of Southern California School of Medicine preferred. Starting date: 1 July 1986 or before. Interested persons should send curriculum vitae to: Dr. Hart Isaacs, Chairman of EM Search, Department of Laboratories, AP Division, Children's Hospital of Los Angeles, 4650 Sunset Boulevard, Los Angeles, Calif. 90027. CHLA and USC are Equal Opportunity Employers.

POLYMER RESEARCH PHYSICIST for university in west Ohio. Will perform research in the area of structure/property correlations of new and novel polymer systems. Molecular packing and morphologies of thermosetting and thermoplastic matrix resin materials along with high temperature resistant intrinsically rigid rod polymers will be determined. Techniques used for this investigation will inclusively use WAXS, SAXS, SANS, SALS, SEM, STEM, and TEM (dark-field, bright-field, and electron diffraction). Mechanical property determinations will include tensile modulus, tensile strength elongation to break, and compressive strength. All of these techniques will be applied in concept to ferret correlations leading to enhanced mechanical properties. Requires Ph.D. in polymer science and 4 years of experience in job described; 40-hour week, 7:45 a.m. to 4:30 p.m.; \$39,360 per year. Send résumés to: Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, Ohio 43216. Attention: Job Order Number 1019607, L. Ellison.

POSTDOCTORAL ASSOCIATE wanted to participate in isolating the H⁺-pumping ATPase of acidic intracellular organelles, characterizing the enzyme, and determining the molecular mechanism of ATP hydrolysis and H⁺ pumping. Available 1 January 1986. A background in membrane biochemistry, protein chemistry, or bioenergetics is desirable but not essential. Send curriculum vitae and names of three references to: Dr. Gary Rudnick, Department of Pharmacology, Yale University School of Medicine, P.O. Box 3333, New Haven, Conn. 06510.

POSTDOCTORAL BIOCHEMIST/CELL BIOLOGIST to work on purification and characterization of phospholipid-dependent protein kinases, their response to putative modulators, identification and characterization of their endogenous substrates, and their roles in control of human leukemic cellular differentiation. Apply with curriculum vitae and references to: Laurence Elias, M.D., University of New Mexico Cancer Center, Albuquerque, N.M. 87131.

POSTDOCTORAL POSITION available from NIHfunded study on the involvement of extracellular matrix components, particularly proteoglycans, in the regulation of aqueous humor outflow. Background in biochemistry or cell biology desired. Experience with protein methods, immunochemistry, or electron microscopy helpful. Send curriculum vitae and names of three references to: Dr. Ted Acott, Departments of Ophthalmology and Blochemistry (L105), Oregon Health Sciences University, 3181 Southwest Sam Jackson Park Road, Portland, Ore. 97201. Telephone: 503-225-8455.

POSTDOCTORAL POSITION—DIET AND CANCER. NIH-supported position available immediately to study dietary and physiological variables affecting endogenous formation of carcinogens, mutagens, and N-nitroso compounds during digestion. Requires expertise in biochemical toxicology, pharmacology, biochemistry, and modern analytical techniques. Experience with animal experiments and pharmacokinetics desirable. Salary commensurate with experience. Please reply with curriculum vitae and references to: Dr. Joseph H. Hotchkiss, Department of Food Science, Cornell University, Ithaca, N.Y. 14853; telephone: 607-256-7616. Cornell University is an Affirmative Action/Equal Opportunity Employer.



POSTDOCTORAL FELLOW. Available immediately to work on molecular biology of mitochondrial DNA. Background in biochemistry and/or recombinant DNA. Competitive salary. Send curriculum vitae and three references to: Dr. D. J. Cummings, Department of Microbiology/Immunology, Box B175, University of Colorado School of Medicine, Denver, Colo. 80262.

Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL POSITION available immediately for 3 years, to study physiological properties of offactory circuits, using HRP and 2DG mapping, microelectrode and voltage-sensitive dye recording, computerized image processing, and neural modeling. Send curriculum vitae and three letters of recommendation to: Dr. John Kauer, Neurosurgery, Tufts-New England Medical Center, 171 Harrison Avenue, Boston, Mass. 02111. Telephone: 617-956-5858.

POSTDOCTORAL POSITION available in genetics and regulation of formation of bacterial and corresponding mammalian multienzyme complexes. The research will include genetical and recombinant DNA methods and enzyme purification. The department is growing and is well-equipped for these studies. Salary will be approximately \$18,000, depending on qualifications. Send résumé and names of three individuals who can be contacted for references to: Dr. John R. Sokatch, Department of Biochemistry and Molecular Biology, The University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, Okla. 73190.

POSTDOCTORAL POSITION available 1 January 1986 for molecular genetic studies on cyclic AMP-dependent protein kinase from mutant mouse lymphoma cells. Background in biochemistry or molecular biology required. Recombinant DNA experience desirable. Salary: \$18,000 minimum. Send curriculum vitae, statement of goals, and three references to: Dr. Robert Steinberg, Department of Biochemistry and Molecular Biology, The University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, Okla. 73190.

POSTDOCTORAL POSITION available immediately for NIH-sponsored research in the areas of virology and viral immunology of herpesvirus infections and LAV/HTLV III (AIDS). This is a collaborative program between the laboratories of Dr. Carel Mulder and Dr. John L. Sullivan. Individuals with experience in immunology, virology, and molecular biology are encouraged to apply. Send curriculum vitae and names of three references to: John L. Sullivan, M.D., Associate Professor, Department of Pediatrics, Molecular Genetics and Microbiology, University of Massachusetts Medical School, 55 Lake Avenue, North, Worcester, Mass. 01605.

POSTDOCTORAL POSITIONS in THE TERRY FOX LABORATORY VANCOUVER, CANADA

Staff: Allen C. Eaves (Director), Connie J. Eaves, Donald H. Howard, R. Keith Humphries, Dagmar K. Kalousek, Gerald Krystal, Dixie Mager, and Fumio Takei.

Two positions are available for individuals interested in working in a multidisciplinary cancer research group on growth factor receptors, differentiation antigens and oncogenes involved in hemopoiesis and lymphopoiesis. Applicants should have a background in biochemistry or molecular biology. Duration of support will be for 2 to 3 years, depending on previous training and goals. Yearly stipend will be C\$22,350 plus \$2,000 for each additional year of previous postdoctoral training.

Applications should be sent with curriculum vitae, and the property of the property of

Applications should be sent with curriculum vitae, copies of university transcripts of courses taken, and the names of three references to:

The Terry Fox Laboratory
British Columbia Cancer Research Centre
601 West 10 Avenue
Vancouver British Columbia,
Canada V5Z 1L3
Telephone: 604-877-6070

POSTDOCTORAL POSITION in cancer biology available immediately to study the role of signal transduction mediated by phospholipids, cyclic AMP, and protein kinases in oncogenic transformation. Experience in enzymology, biochemistry, or tumor biology is desirable. Send curriculum vitae and names of three references to: Dr. Arthur H. Lockwood, Korman Pavilion, Albert Einstein Medical Center, York and Tabor Roads, Philadelphia, Pa. 19141.

POSITIONS OPEN

POSTDOCTORAL POSITIONS. At least two post-doctoral positions are available in cardiac electrophysiology with a third in the electrophysiology of the lens. The research laboratories study Purkinje and ventricular syncytial cardiac preparation as well as isolated myocytes from these two tissues. The lens research focuses upon steady-state syncytial properties and the localization of cell membrane properties within the tissue. Research techniques include intracellular recording, voltage and patch clamping, as well as impedance analysis. Send résumé to: Dr. I. Cohen and R. T. Mathias, Department of Physiology and Biophysics, Health Science Center, State University of New York (SUNY) Stony Brook, Stony Brook, N.Y. 11794. SUNY, Stony Brook, is an Affirmative Action/Equal Opportunity Educator and Employer. AK Number 297-85.

POSTDOCTORAL POSITION available immediately for recent Ph.D. with molecular biology/protein chemistry background to investigate the function of adenovirus early proteins and their effect on eukary-otic cellular processes. Minimum starting salary of \$20,000. Send curriculum vitae and research interests to:

Dr. M. L. Harter
Department of Microbiology
University of Medicine and Dentistry of New Jersey
100 Bergen Street
Newark, New Jersey 07103
Telephone: 201-456-5218

POSTDOCTORAL POSITION available to study the role of extracellular matrix molecules in muscle differentiation and synapse formation during limb development, as part of an NIH-funded program project involving five departmental faculty. Areas of interest include the developmental role of an identified ECM protein that aggregates acetylcholine receptors on muscle cells (J. Cell Biol. 99: 615) and identification of new, muscle-specific ECM molecules in developing limb. Applicants should have a background in cell, developmental, or neurobiology; some experience in electron microscopy desirable. Funding for up to 3 years; send curriculum vitae, brief statement of research interests, and names of three references to: Dr. Earl Godfrey, Department of Anatomy and Cellular Biology, Medical College of Wisconsin, 8701 Watertown Plank Road, Milwaukee, Wis. 53226.

POSTDOCTORAL POSITION AVAILABLE—MOLECULAR, IMMUNOLOGIC, AND BIOLOGIC STUDY OF AIDS. Experience in cell culture and clinical virology and molecular approaches to the disease helpful. Position open anytime after May 1986. Send curriculum vitae to: Jay Levy, Cancer Research Institute, University of California, San Francisco, Calif. 94143-0128.

POSTDOCTORAL POSITIONS available immediately with multidisciplinary team working on the molecular genetics of atherosclerosis and plasma lipid metabolism. Background in molecular biology, genetics, or biochemistry preferred. Send curriculum vitae and names of references to: A. J. Lusis, Molecular Biology Institute, University of California, Los Angeles, Calif. 90024.

POSTDOCTORAL POSITION in molecular virology. A 2-year position is available to study murine retroviral pathogenesis or retroviral-mediated gene transfer. Experience in biochemistry or molecular biology required. Please send curriculum vitae and names of three references to: Dr. Christie A. Holland or Joel S. Greenberger, M.D., Department of Radiation Oncology, University of Massachusetts Medical Center, 55 Lake Avenue North, Worcester, Mass. 01605. An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION to study control of cell proliferation by steroids and growth factors. Excellent facilities are available in a stimulating environment for training in the area of hormone action. Please send curriculum vitae and a brief description of background and interests to: George M. Stancel, Department of Pharmacology, University of Texas Medical School, P.O. Box 20708, Houston, Texas 77225. An Equal Opportunity Employer. Women and minorities are encouraged to apply.

POSTDOCTORAL POSITION available 2 January 1986 to study the synthesis and incorporation of cell wall polyuronides in *Mucor*. Ph.D. in biochemistry or microbiology with research interest in fungal cell wall polysaccharides preferred. Send curriculum viae and three letters of reference to: Dr. Vicente D. Villa, Biology Department, Southwestern University, Georgetown, Texas 78626.

POSITIONS OPEN

POSTDOCTORAL POSITION IN PHARMACOL-OGY/MOLECULAR BIOLOGY available 1 January 1986 to study cellular regulation of cytochromes P450, Recent Ph.D. in biochemistry or pharmacology. Experience in protein purification desirable. Expected to learn and develop recombinant DNA technology for studies of genetic control of cytochrome synthesis. Send curriculum vitae and names of three references to: Dr. Colin R. Jefcoate, Department of Pharmacology, University of Wisconsin Medical School, 1300 University Avenue, Madison, Wis. 53706.

POSTDOCTORAL POSITION available for research on heparin sulfate proteoglycans, emphasizing processing events, and regulation of gene expression. Approaches include biochemical characterization, isolation of cell mutants, and recombinant DNA technology. A recent Ph.D. in biochemistry or molecular biology is required. Submit curriculum vitae and three letters of recommendation to: Dr. J. M. Keller, Department of Biological Chemistry and Structure, University of Health Sciences/The Chicago Medical School, North Chicago, Ill. 60064.

TWO POSTDOCTORAL POSITIONS available immediately, one to examine protein secretion and the signal recognition particle, the other to investigate proteins and cell surface receptors involved in the regulation of blood coagulation. Experience with proteins, nucleic acids, and/or fluorescence spectroscopy preferred. Send résumé, names of three references, and brief summary of research experience to: Dr. Arthur E. Johnson, Department of Chemistry, University of Oklahoma, Norman, Okla. 73019.

POSTDOCTORAL POSITIONS

Lipids-Atherosclerosis-Nutrition Training Program funded by NHLBI. Postdoctoral traineeships are available for research and training in areas of (i) lipoprotein structure and metabolism, (ii) development of cholesterol and bile acid homeostatic mechanism, (iii) pathogenesis of atherosclerosis, (iv) role of branched chain amino acids in lipid metabolism and nutrition, (v) lymphocyte physiology and lipoproteins, and (vii) epidemiological aspects of hyperlipoproteinemia. Faculty includes W. F. Balistreri, B. N. Campaigne, J. A. K. Harmony, J. E. Heubi, J. E. Fischer, C. J. Glueck, R. L. Jackson, J. M. Vander Bel-Kahn, E. A. Stein, M. T. R. Subbiah, and R. C. Tsang. Candidates with a Ph.D. degree in biomedical fields and those with M.D. degree, with appropriate research experience, are eligible to apply. Applicants must be U.S. citizens or hold an immigrant visa. Send curriculum vitae with three letters of recommendation indicating the special area of research interest to: Dr. M. T. R. Subbiah, Program Director, University of Cincinnati Medical Center, 234 Goodman Street, K-Pavilion, M. L. Number 540, Cincinnati, Ohio 45267.

POSTDOCTORAL POSITION to study molecular basis of natural polymorphisms affecting alcohol dehydrogenase expression in *Drosophila*. Current work involves in vitro manipulation of cloned sequences followed by P element transformation to assess effects on expression in vivo. Experience with recombinant DNA methods is desirable. Send curriculum vitae and three letters of reference to: Cathy C. Laurie-Ahlberg, Department of Genetics, Box 7614, North Carolina State University, Raleigh, N.C. 27695. North Carolina State University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION

To study the molecular biology of cell adhesion receptors by analysis of gene structure regulation, and tissue specific expression. Reply with curriculum vitee to:

Mark H. Ginsberg, M.D. Department of Immunology Research Institute of Scripps Clinic 10666 North Torrey Pines Road La Jolla, Calif. 92037

Equal Opportunity/Affirmative Action Employer, M/F/H

POSTDOCTORAL RESEARCH ASSOCIATE for studies of the catalytic mechanism and metal function in certain metalloenzymes, such as carbonic anhydrase and aldehyde oxidase, using spectroscopic and kinetic methods. Experience with enzyme kinetics or recombinant DNA helpful. Salary commensurate with experience. Send résumé and names of three references to: Dr. D. N. Silverman, J-267 Health Center, University of Florida, Gainesville, Fla. 32610.

QUIDEL, a rapidly growing pharmaceutical company in La Jolla, California, invites applicants for the position of SENIOR RESEARCH SCIENTIST/ PROJECT LEADER DIAGNOSTICS

Highly qualified scientist sought to be project leader in development of advanced rapid enzyme immunodiagnostic products. Successful candidate will be talented, well-trained Ph.D. or M.D. with background in monoclonal antibody technology, immunochemistry and biochemistry and a desire to perform bench research. Individual will have demonstrated ability to develop state-of-the-art rapid enzyme immunoassays and bring product through research into development.

Salary is commensurate with background and experience. Excellent benefits package which includes employee incentive stock option program. Send your resume to:

> QUIDEL **Personnel Department** Attn: Lucy Gunnill

Equal Opportunity Employer

QUIDEL 11077 North Torrey Pines Rd., La Jolla, CA 92037

Senior Fermentation Microbiologist

Merck Sharp & Dohme Research Laboratories, a worldwide leader in pharmaceutical research, has an immediate opening for a Senior Fermentation Microbiologist. The incumbent will be responsible for the research and development of fermentation processes for the production of antibiotics, proteins, and pharmaceutical chemicals on a small pilot-plant scale. The successful candidate will lead in the development of new fermentation technologies applied to the full spectrum of biotechnology. This senior scientific position requires a Ph.D. degree or equivalent in microbiology and/or biochemistry with a strong background in fermentation biochemistry and regulation of microbial metabolism.

A minimum of 5 to 7 years of industrial fermentation experience with proven research ability and strong interpersonal and communication skills is required. This is an ideal opportunity for the extraordinary individual who is a self-starter and likes to shape events in process evolution.

Merck Sharp & Dohme Research Laboratories are located in Rahway, New Jersey approximately 20 miles south of New York City. Our salaries, benefits, and growth potential

Interested candidates should submit their curriculum vitae with the names of three references and salary requirements to: Ms. Alaina L. Love, Merck Sharp & Dohme Research Laboratories, P.O. Box 2000, Rahway, New Jersey 07065.

Merck Sharp & Dohme Research Laboratories

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Roche Diagnostic Systems is a dynamic, critical part of Hoffmann-LaRoche's firm commitment to a healthier tomorrow through the development of innovative medical testing methods. Our scientists are known for their unique talent and ability to excel at breakthrough discoveries in areas such as radio/enzyme immunoassays, clinical chemistry assays and procedures, microbiological testing, and assays for sexually transmitted diseases.

We seek exceptional scientists for the following

Senior Scientist-Requires a project-oriented individual with the ability to interact effectively with both Research and Production personnel and to provide guidance and support to junior scientists. Knowledge of GMP's and in vitro diagnostic regulations (510 (k) PMA) desirable. Position

requires a PhD in Biochemistry, Immunology, Virology or related discipline, plus proven problem-solving ability and good communications skills.

Scientist-Requires a self-directed problem solver with good communications skills and the ability to develop testing methods for the quality control of new diagnostic products. Must be capable of interacting with other disciplines. MS in Biochemistry or related field needed, plus some experience in the diagnostic area.

Discover your true potential with Roche Diagnostic Systems, where the environment is conducive to personal and professional achievement, salaries are fully commensurate with background and ability, and benefits are excellent. Please send your resume with current salary information to: Ms. Jackie Nadal



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TWO POSTDOCTORAL POSITIONS in molecular biology. First position involves electrophysiological analysis of mutant photoreceptors. Experience with recording from small cells and with cell culture techniques desirable. Direct inquiries about this position to: Dr. Robert Stephenson, telephone: 313-577-2861. Second position involves studies on regulation and evolution of contractile protein genes in Drosophila. Experience in molecular biology and recombinant DNA technology preferred. Direct inquiries about this position to: Dr. Ann Sodja, telephone: 313-577-2908. Salary is \$17,000, plus fringe benefits. Positions are for 1 year, with possibility of extension. Send letter of application, curriculum vitae, and three letters of reference by 31 December to one of the individuals above, Department of Biological Sciences, Wayne State University, Detroit, Mich. 48202. An Equal Opportunity/Affirmative Action Employer. TWO POSTDOCTORAL POSITIONS in molecular

POSTDOCTORAL POSITIONS—PROTEIN CHEMISTRY—MOLECULAR BIOLOGY

CHEMISTRY—MOLECULAR BIOLOGY

Openings for recent Ph.D.'s in biochemistry or molecular biology to study the biosynthesis and regulation of the protein processing enzymes. Projects include purification of the enzymes regulating acetylation of the N-terminus of eukaryotic proteins, acetylation of lysyl side chains of histones, and amidation of the C-terminus of eukaryotic proteins; cloning the encoding genes; site-specific mutagenesis; and characterization of transcriptional and translational regulation. Applicants should have a strong interest in protein chemistry, a background in chromatographic methods, and a familiarity with molecular biological techniques. The initial phase of each project will be enzyme purification. Successful applicants will join a well-equipped laboratory with state of the art facilities for protein sequence analysis, peptide and oligonucleotide synthesis, HPLC, and molecular biology. Call or write: John A. Smith, M.D., Ph.D., Departments of Molecular Biology and Pathology, Massachusetts General Hospital and Harvard Medical School, Fruit Street, Boston, Mass. 02114. Telephone: 617-726-5954.

POSTDOCTORAL POSITION—The DANA-FAR-BER CANCER INSTITUTE is seeking to fill one research position at the postdoctoral level to study the biochemistry and regulation of mammalian liver cytochrome P-450 isoenzymes active in the metabocytochrome P-450 isoenzymes active in the metabolism of both foreign compounds and steroid hormones. Experience in biochemistry, enzymology, molecular biology, or a related biological science desired. Joint appointment will be held in an appropriate department at Harvard Medical School. Start date is flexible. Please send résumé, copies of representative publications, and names of three references to: Dr. David J. Waxman, Division of Cancer Pharmacology, DANA-FARBER CANCER INSTITUTE, 44 Binney Street, Boston, Mass. 02115. An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION in VISION RE-SEARCH, supported by a grant from the National Eye Institute. This position will involve electro-physiological and biochemical studies of light/dark pnysiological and biochemical studies of light/dark adaptation in the photoreceptors, and studies of interactions between the retina and pigment epithelium. Submit letter of application, including curriculum vitae, and the names of three references by 23 December 1985 to: Dr. David R. Pepperberg, Department of Ophthalmology, University of Illinois College of Medicine, 1855 West Taylor Street, Chicago, Illinois 60612

An Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL POSITION. Available immediately; molecular biology of gene expression in yeast. Send curriculum vitae and one letter of recommendation to: Dr. J. Marmur, Department of Biochemistry, ALBERT EINSTEIN COLLEGE OF MEDICINE, 1300 Morris Park Avenue, Bronx, N.Y. 10461. An Equal Opportunity Employer.

POSTDOCTORAL RESEARCH FELLOW-Available immediately. Design and carry out syntheses and chemical characterization of new molecules in the benzodiazepine and quinone classes anticipated to have significant antitumor activity. Position includes joint appointment at Harvard Medical School. Requires Ph.D. in organic chemistry. Send curriculum vitae and three letters of recommenda-tion to: Dr. Beverly A. Teicher, DANA-FARBER CANCER INSTITUTE, 44 Binney Street, Boston, Mass. 02115. An Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

Position announcement—POSTDOCTORAL RE-SEARCH ASSOCIATE PROGRAM IN FOREST MI-CROBIOLOGY—The School of Forestry and Envi-ronmental Studies seeks an individual with a doctor-al degree in forestry forest goology as for ronmental Studies seeks an individual with a doctor-al degree in forestry, forest ecology, or forest micro-biology to assist in the development of a research program in the physiology or physiological ecology of the interaction of forest trees and microbes. This 11-month position carries an annual salary of \$20,000 and is located in New Haven, Connecticut. It is an annual position with renewal dependent upon It is an annual position with renewal dependent upon performance and the availability of funds. An employment period of 2 years is envisioned. The position is available immediately. Send curriculum vitae, statement of research interests, and the names of three referees to: John C. Gordon, Dean, School of Forestry and Environmental Studies, Yale University, 205 Prospect Street, New Haven, Conn. 06511. Yale is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

Postdoctoral position available to contribute to a newly funded project to study the molecular genetics newly funded project to study the molecular genetics of the supramolecular photosynthetic membrane complex in *Rhodopseudomonas sphaeroides*. The applicant will develop and apply a novel combined chemical and enzymological technique to synthesize very long single strands of DNA *de novo*. These will form the basis for the in vitro mutagenesis of the relevant genes by direct synthesis. The applicant would be involved from the synthesis through the analysis of the effects of the mutations. Applicant should have experience in nucleic acid enzymology analysis of the effects of the initiations. Applicant should have experience in nucleic acid enzymology and/or the synthetic organic chemistry of oligode-oxyribonucleotides. Position funded for 2 years with a yearly starting salary >\$16,000.

For full consideration, please send application materials (letter with a synopsis of research interests and career goals, three letters of reference, reprints or preprints, and curriculum vitae) by 15 December 1985 to:

Professor Richard I. Gumport Department of Biochemistry University of Illinois 1209 West California Street Urbana, Ill. 61801 Telephone: 217-333-2852

Starting date will be approximately 1 January 1986. The University of Illinois is an Affirmative Action/ Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE available in MOLECULAR BIOLOGY. Individuals with Ph.D. are invited to apply to the Department of Biology at the University of North Carolina, Chapel Hill, for a position with one of our faculty in molecular biology and biotechnology. The department has recently expanded its resources in molecular biology and is engaged in the following research: chromosome mechanics and molecular and develop-mental genetics in bacteria, yeast and fungal systems, bacterial plant pathogens, *Drosophila, Xeno-*pus, and maize. Please send curriculum vitae and three letters of reference by 30 November 1985 to: Research Associate Search, The Department of Biolo-gy, Coker Hall 010A, University of North Carolina, Chapel Hill, North Carolina 27514. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE positions are immediately available to work in a multi-disciplinary environment to study the molecular mechanisms of gonadotropin action in corpus lutemechanisms of gonadotropin action in corpus lute-um. Previous experience in cell separation, purifica-tion and culturing techniques is required for one position. For the second position, previous experi-ence in studying eukaryotic gene expression is re-quired. Interested candidates please send curricu-lum vitae, three references, and a statement of research goals to: Dr. C. V. Rao, Department of Obstetrics/Gynecology, University of Louisville, 438 MDR Building, Louisville, Ky. 40292. An Equal Opportunity/Affirmative Action Employer.

PROFESSOR AND HEAD. Department of Bacteriol-PROFESSOR AND HEAD. Department of Bacteriology and Biochemistry, College of Agriculture, University of Idaho. The department has programs in bacteriology, biochemistry, food science/nutrition, and molecular biology. Applicants should have a Ph.D. in one of these or a related field, a distinguished research/teaching record, and potential or proven administrative ability. For details, contact: Dr. D. J. LeTourneau, Department of Bacteriology and Biochemistry, University of Idaho, Moscow, Idaho 83843 (telephone: 208-885-7015), by 15 January 1986. An Equal Opportunity/Affirmative Action Employer and Educational Institution.

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE available immediately in the Department of Anesthesiology, University of Utah. Position involves the elucidation of molecular mechanism of anesthetics. Area dation of molecular mechanism of anesthetics. Area of study includes the effects of anesthetics on macromolecular materials using Fourier transform infrared spectrophotometry, Raman scattering spectroscopy, differential scanning calorimetry, gas chromatography, x-ray diffractometry, and modern spectroscopy. A Ph.D. in physical chemistry or fuels engineering with strong background in spectroscopy instrumentations is desirable; \$14,000 per year, 40 hours per week. Send résumé and three letters of recommendation to: Job Service, P.O. Box 11750, Salt Lake City, Utah 84147. Telephone: 801-533-2400. Job Order Number 46698. Equal Opportunity/Affirmative Action Employer. Action Employer.

POSTDOCTORAL RESEARCH FELLOW position available immediately to study chemical and biochemical actions and interactions of ionizing radiachemical actions and interactions of ionizing radia-tion and sulfhydryl-containing radioprotectors in mammalian cells and their DNA. Experience in tissue culture, DNA damage assays, sulfhydryl bio-chemistry, or radiobiology desirable. Dual appoint-ment at Harvard Medical School and Massachusetts General Hospital possible for qualified candidate. Please send curriculum vitae and names of three references to:

> Dr. K. D. Held Department of Radiation Medicine Massachusetts General Hospital Boston, Mass. 02114

Affirmative Action/Equal Opportunity Employer

POSTDOCTORAL RESEARCH POSITION available January 1986 or later to study: (i) the gene for a newly discovered extracellular matrix protein made by cultured human mesothelial cells, or (ii) the expression of engineered genes transfected into mesothelial cells. A strong background in biochemistry and molecular biology is essential. Salary equivalent to NIH postdoctoral fellowship. Position includes joint appointment at Harvard Medical School. Send curriculum vitae, summary of research and course experience, thesis abstract, and the names and addresses of three references to: Dr. James G. Rheinwald, DANA-FARBER CANCER INSTITUTE, 44 Binney Street, Boston, Mass. 02115. An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCH POSITION

Molecular biology of insect defense mechanisms; regulation and function of bacterial protoxins specific for insect larvae. Cloning, sequencing, HPLC, microbial genetics, bioassays. Please send curriculum vitae (including three names for references) to: Dr. P. Dunn, Department of Entomology, or A. Aronson, Department of Biological Sciences, Purdue University, West Lafayette, Ind. 47907. Purdue is an Affirmative Action/Equal Opportunity Employer.

PURDUE UNIVERSITY—DEPARTMENT OF PSYCHOLOGICAL SCIENCES invites applications for a DISTINGUISHED PROFESSORSHIP in the area of psychobiology, broadly defined. The University is funding a number of distinguished professorships and psychobiology is one area approved for recruiting. We are interested in a person recognized as a leader in the study of brain-behavior relationas a leader in the study of brain-behavior relationships. Applications or nominations should be sent to: Dr. Elizabeth D. Capaldi, Head, Department of Psychological Sciences, Purdue University, West Lafayette, Indiana 47907. Applications received prior to 30 November 1985 will be given fullest consideration, but applications will be accepted for the position until it is filled. Women and minorities are especially encouraged to apply especially encouraged to apply.

Purdue University is an Equal Opportunity/Affir-

mative Action Employer.

RESEARCH ASSOCIATE POSITION available immediately to study species differences in carcinogen metabolism. Ph.D. in organic chemistry, biochemistry, toxicology, or pharmacology and previous research experience in drug metabolism required. Appointment initially for 1 year, renewable. Send curriculum vitae and names of three references to: Dr. Thomas J. Curphey, Department of Pathology, Dartmouth Medical School, Hanover, N.H. 03756.

RESEARCH ASSOCIATE. Cellular immunology, monoclonal antibodies, protein separation-characterization, immunoassays. Autoimmune disease research. M.S.-Ph.D. Curriculum vitae and names of three references to: Tito Cavallo, M.D., 201 Keiller Building, The University of Texas Medical Branch, Galveston, Tex. 77550. Affirmative Action/Equal Operativity. Employer. portunity Employer.



State of Illinois Department of Nuclear Safety 1035 Outer Park Drive Springfield, Illinois 62704

The Illinois Department of Nuclear Safety is a growing cabinet-level agency with a comprehensive mission relating to nuclear and radiation safety. IDNS, with a current staff of more than 150, has positions for nuclear engineers, health physicists, health physics technicians, radioecologists

Among IDNS programs are: emergency planning and response to radiation accidents; nuclear plant monitoring; extensive inspection/escort of spent fuel shipments; regulation of low-level radioactive waste management activities and licensing a disposal facility regulation of ionizing radiation sources. The State of Illinois has applied for designation as an Agreement State by the

The Department of Nuclear Safety currently has the following position vacancies:

Division of Emergency Planning

-Nuclear Safety Specialist (Emergency Planner), multiple positions located in Springfield

Division of Nuclear Chemistry

--- Health Physicist (Radiochemistry), multiple positions in Springfield

Division of Nuclear Materials

-Health Physicist (Radioactive Material Inspection and Licensing Program), multiple positions in Springfield and Chicago

Division of Waste and Transportation

-Civil Engineer (Low-Level Facility Design/ Licensing), position in Springfield

-Health Physicist (Spent Fuel Inspection) Escort), position in Springfield

-Nuclear Safety Specialist (Health Physics/ Air Monitoring), position in Springfield

-Nuclear Safety Specialist (Low-Level Waste Policy Analyst), position in Springfield

Send resumes to:

Personnel Officer IDNS 1035 Outer Park Drive

Springfield, IL 62704

IDNS is an Equal Opportunity Employer and encourages applications from qualified minority and

Entry-level positions also exist for recent college graduates with appropriate degrees.

IDNS: Making Illinois a Leader in Nuclear Safety

INSTITUTE OF HUMAN GENETICS

Director, Microchemical Laboratory

The Institute of Human Genetics at the University of Minnesota Medical School invites applications for Director of a new Microchemical Facility. The person filling this position will maintain and operate sophisticated instrumentation used to sequence peptides, and synthesize peptides and oligonucleotides, develop and improve procedures related to the synthesis and sequencing capability of the Facility; instruct students and postdoctoral trainees in the operation and application of equipment; supervise laboratory technicians; interact with clients, and facilitate their use of the laboratory; administrate the general operations of the laboratory including expenditures and income.

Only individuals with the following credentials need apply: PhD in organic or biochemistry; postdoctoral experience in peptide synthesis and/or peptide sequence determination; experience with the chemistry of peptide synthesis and the use of gas phase peptide sequencing equipment; HPLC, and other instruments employed in the synthesis and sequencing of peptides.

The University of Minnesota is an equal opportunity educator and employer and specifically invites and encourages applications from women and minorities. Applicants should send curriculum vitae and names of three professional references by December 31, 1985 to: Cynthia Savage, Civil Service Personnel, University of Minnesota, 1919 University Ave., St. Paul, MN 55104.

Postdoctoral Fellowships at the Woods Hole Oceanographic Institution

Ocean Science and Engineering

Applications are invited from new or recent doctorates in science or engineering with interests in physical oceanography, marine chemistry, marine geology and geophysics, biological oceanography, or oceanographic engineering. Recipients of awards are selected on a competitive basis, with primary emphasis placed on research promise.

Marine Policy and Ocean Management

Fellowships are offered to individuals in social sciences, law. or natural sciences to apply their training to problems that involve the use of the oceans. Present themes in the program include marine policy problems and opportunities in developing countries, policy and management issues concerning fisheries, marine minerals, and coastal zone use, implications of the Law of the Sea Treaty for ocean activities, development and governance issues in the Polar region, use of scientific information in decision making and policy planning, and other research topics. Applicants must have completed a doctoral level degree or possess equivalent professional qualifications through career experience.

Fellowships are awarded for one year with a stipend of \$23,100 plus group health insurance and a modest research budget. Recipients are encouraged to pursue their own research interests independently or in association with resident staff. Completed applications must be received by 15 January 1986 for 1986 - 87 awards. Awards will be announced by 1 March. Write for application forms to:

Dean of Graduate Studies P.O. Box S

Woods Hole Oceanographic Institution Woods Hole, Massachusetts 02543

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RADIOLOGIC SCIENCES (M.S. or Ph.D.) at the level of research associate to assist in the running of an animal/patient cardiac research facility. There will be an academic appointment at the University of Oklahoma. The laboratory is funded by a privately endowed research foundation. The goals of the laboratory are to develop and apply noninvasive cardiac imaging modalities to the study of cardiac disease and physiology. Modalities currently include isotopes, echocardiography, and nuclear magnetic resonance. The associate would assist in study design and execution, data analysis, and manuscript preparation. The associate's training would ideally include radiologic sciences, statistics, computer programming, and physiology. Please forward curriculum vitae and names of three references to:

Robert D. Okada, M.D.
Saint Francis of Tulsa Medical Research Institute
6465 South Yale
Suite 1010
Tulsa, Oklahoma 74136

RESEARCH ASSOCIATE

Ph.D., biochemistry, experienced in isolation of membrane proteins, reconstitution of transport systems. Two years of postdoctoral work preferred. To study insect K⁺ ATPase and transport by cell membrane fragments. Up to \$20,000 annually. Available 1 December 1985 for 2½ years, renewal possible. Send curriculum vitae and references to: William R. Harvey, Ph.D., Professor of Biology, Temple University, Philadelphia, Pa. 19122.

RESEARCH ASSOCIATE UNIVERSITY OF PITTSBURGH

A research associate position is available in the Department of Industrial Environmental Health Sciences, Graduate School of Public Health, for an M.D. or Ph.D. to characterize an animal model for byssinosis. Applicants should be familiar with principles of dust generation and measurement of lung function in small animals. Competence in microbiology, immunology, and computer programming desirable. Apply to:

Dr. Meryl H. Karol University of Pittsburgh Graduate School of Public Health 130 DeSoto Street Pittsburgh, Pa. 15261

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

RESEARCH ASSOCIATE available immediately. Studies on role of MHC genes in swine reproduction and embryo survival. Background in immunology, genetics, and/or biochemistry required. Modern techniques, including monoclonal antibodies and recombinant DNA methods, to be used. Excellent, multidisciplinary research environment. Send curriculum vitae and three letters of reference to: Dr. Carol M. Warner, Department of Biochemistry, Iowa State University, Ames, Iowa 50011.

RESEARCH ASSOCIATE OR RESEARCH ASSISTANT PROFESSOR

A research associate or research assistant professor position is available immediately. Both are nontenure-track positions. We are seeking an individual with a Ph.D. in biophysics, biochemistry, or related field. Research experience and working knowledge in areas of membrane systems, statistical thermodynamics, enzyme kinetics, and computer hardware and software development is desired. The area of research to be undertaken relates to the modulation of phospholipase activity by membrane structural fluctuations using techniques such as TLC, differential scanning calorimetry, and pH stat methods.

Send curriculum vitae and names of references by 1 February 1986 to: Dr. Rodney L. Biltonen, Department of Pharmacology, University of Virginia, Charlottesville, Virginia 22908. The University is an Equal Opportunity

RESEARCH NEUROSCIENTIST

A position is available for a Ph.D. with 1 to 4 years of postdoctoral experience in an area relevant to cerebrovascular disease with expertise in autoradiography. The person selected will hold a joint academic appointment in a Basic Science Department and Clinical Neurological Sciences and is expected to obtain independent research funding. Submit curriculum vitae and three letters of reference to: Dr. V. C. Hachinski, Chairman, Division of Cerebrovascular Research, University of Western Ontario, London, Ontario, Canada N6A 5A5.

POSITIONS OPEN

RESEARCH CHEMIST, GS-11, Northern Regional Research Center, Peoria, Illinois.

Agricultural Research Service (ARS) is seeking a biochemist to conduct research on legume seed and root proteins that specifically interact with rhizobial exopolysaccharides. The work will require isolation and characterization of proteins and glycoproteins as well as of rhizobial polysaccharides and their degradation products. Graduate training and post-doctoral experience in protein chemistry and polysaccharide structural analysis are desirable. A background in plant biochemistry is considered helpful. Must be U.S. citizen. Salary is commensurate with experience (\$26,381 to \$29,018 per annum). For information on the research program and/or position, contact: M. E. Slodki, telephone: 309-685-4011. For information on application procedures/forms, contact: Barbara Lamm, telephone: 301-344-2756. Applications in response to this advertisement should be marked No5. Applications must be received by 1 January 1986. Mail to: Helen Sweeney, Northern Regional Research Center, ARS, U.S. Department of Agriculture, 1815 North University, Peoria, Ill. 61604.

RESEARCH SCIENTISTS POSTDOCTORAL FELLOWS

The Life Sciences Department of IIT Research Institute, a not-for-profit, Chicagobased research organization, has positions available for staff scientists and postdoctoral fallows.

Candidates for staff positions must possess a doctorate degree, 2 to 3 years of postdoctoral experience, and an appropriate record of productivity as documented by publications in either carcinogenesis, gene expression, growth regulation, or pharmacokinetics. Ample opportunity is offered for development of an independent research program in own field of expertise.

Postdoctoral candidates should have an expressed interest in one of the above areas and a strong background in either experimental pathology, physiology, pharmacology, or biochemistry.

U.S. citizenship or permanent U.S. residen-

Salary commensurate with qualifications and experience. Please submit résumés, including salary history, to: L. Amft, Professional Staffing, Department S/10, IIT RESEARCH INSTITUTE, 10 West 35 Street, Chicago, Ill. 60616. Equal Opportunity/Affirmative Action Employer, M/F/V/H.

SCIENCE EDUCATION/BIOLOGY. Tenure-track, assistant professor position starting August 1986. Ph.D. in science education required with strong training in biology and coursework in the earth and physical sciences. A minimum of 3 years of public school teaching experience is required. Responsibilities to include the teaching of general science, general biology, general botany, or general zoology; laboratory coordination; supervision of student teachers; and the development of an active research program and direction of graduate students. Closing date for applications: 31 January 1986. Send curriculum vitae, transcripts, and three letters of recommendation to: Dr. Melanie Lewis, Chairman, Search and Screen Committee, Southwest Texas State University (SWTSU), San Marcos, Tex. 78666. SWTSU is an Equal Opportunity/Affirmative Action Employer.

SCIENCE WRITING TEACHER/ADMINISTRA-TOR. Preceptor in Expository Writing, Harvard University. Full-time writing teacher who teaches two sections, 15 students each, of Expository Writing: Science each term. Help director administer program. Salary: about \$21,500 plus benefits. One-year contracts renewable up to 8 years. Candidates must have extensive publications and at least 3 years of experience teaching writing. Publications must be in nonfiction; some publications must be outside field of composition. Advanced degree not required. Administrative experience a plus. Applications deadline: 1 December 1985. Send résumé, copies of publications, and references to: Richard Marius, Expository Writing, Harvard University, Harvard Union Third Floor, 12 Quincy Street, Cambridge, Mass. 02138. Materials submitted will not be returned. Position available 1 September 1986. Minority applications encouraged.

POSITIONS OPEN

RESEARCH ASSOCIATE: Experimental research in synthetic organic chemistry for a nonprofit medical research organization using knowledge of organic chemistry and bioorganic chemistry and laboratory equipment/analytic techniques including UV, IR, NMR and mass spectroscopy, GC, HPLC, TLC, and column chromatography: large-scale synthesis of proximate metabolites of environmental carcinogens known as polynuclear aromatic hydrocarbons and their fluoro-derivatives and study their behavior at attack sites. Ph.D. in chemistry plus 1 year of experience in job offered or 18 months of experience in synthesis of polynuclear aromatic hydrocarbons and their metabolites required; 35-hour week; \$20,000 per annum. DOT 022.061.010. Mail résumé to: New York State Job Service, Job Number 8024459, 485 Fifth Avenue, New York, N.Y. 10017.

The Section of Pediatric Neurology at the University of Michigan in Ann Arbor has a position available at the RESEARCH INVESTIGATOR level (research faculty track). A Ph.D. in toxicology and 2 or more years of postdoctoral training with experience in electron microscopy are required. Laboratory currently investigating toxic reactions of brain endothelial cells. Contact: Gary Goldstein, M.D., Section of Pediatric Neurology, University of Michigan Medical Center, Ann Arbor, Michigan 48109; telephone: 313-763-6645. A nondiscriminatory, Affirmative Action Employer.

SILVICULTURE/FOREST PRODUCTIVITY DUKE UNIVERSITY

The School of Forestry and Environmental Studies seeks to fill a full-time, tenured or tenure-track position; rank commensurate with qualifications. Requires Ph.D. in silviculture or an area that provides teaching and research capability in forest and productivity, including but not limited to physiology vegetation management, soil fertility, and ecology. Responsibilities: teach graduatelevel courses in the Forest Resource Management Program; develop externally funded research projects; advise students and direct graduate student research. Submit curriculum vitae, representative publications, transcripts (for recent graduates), and names of three references to: Dan Binkley, Chair, Forest Productivity Search Committee, School of Forestry and Environmental Studies, Duke University, Durham, N.C. 27706. Position will remain open until 1 February 1986, or until filled. Equal Opportunity/Affirmative Action Employer.

MEETING

STEROID HORMONE REGULATION OF EXTRACELLULAR MATRIX PROTEINS COCHAIRMEN—KENNETH CUTRONEO, Ph.D., AND ROBERT DIEGELMANN, Ph.D 29 June to 2 July 1986 BASIN HARBOR CLUB VERGENNES, VERMONT

Cellular and molecular mechanisms of hormone regulation of extracellular proteins will be discussed. Topics will focus on glucocorticoid and sex hormone regulation of collagen, fibronectin, and elastin metabolism during normal growth and in disease states. All participants are invited to present posters.

For additional information, contact:

Maureen E. Hanagan, Coordinator Continuing Medical Education 235 Rowell Building University of Vermont Burlington, Vt. 05405 Telephone: 802-656-2292

WORKSHOP

WORKSHOP ON AUDITORY PERCEPTION OF COMPLEX SOUND

The Air Force Office of Scientific Research is sponsoring a small workshop from 10 to 12 April 1985 (in Sarasota, Florida) of 20 scientists interested in auditory perception of complex sounds. Scientists interested in presenting a paper should request applications, as soon as possible, from: William A. Yost, Parmly Hearing Institute, Loyola University, 6525 North Sheridan Road, Chicago, Ill. 60626. Deadline for submitting a proposal is 15 January 1986.

Cell Biologist/ Biochemist

Continuing its commitment to a strong research organization, Upjohn's Pharmaceutical Research and Development Division, located in Kalamazoo, Michigan, is pleased to announce an opening in the Atherosclerosis and Thrombosis Research Unit. This position will study the role of cell mitogenesis and cell growth modulators in the development of atherosclerosis. Specific projects include: study of cell growth regulation, quantification, isolation and characterization of cell growth regulatory activities and studies of growth factor-receptor interactions.

Applicants should have a B.S. degree with a minimum of two years of related experience or an M.S. degree. Required techniques are: tissue culture, study of cell growth factors, isolation and characterization of proteins. Experience in applying HPLC and electrophoretic techniques for characterization of proteins is desirable.

Kalamazoo is a medium-sized Southwestern Michigan community with immediate access to a mix of excellent cultural, educational and recreational pursuits, including numerous lakes and a four-season climate. Upjohn offers an excellent salary, commensurate with experience and an outstanding benefits program.

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PROGRAM

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For additional information send for bulletin: Rand Graduate Institute, 1700 Main Street, P.O. Box 2138, Santa Monica, Calif. 90406-2138, or phone: 213/393-

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Applicants for these positions must send curriculum vitae, summary of previous research experience, and two letters of reference to any of the above four investigators at: The University of Texas Health Science Center at Dallas, 5323 Harry Hines Boulevard, Dallas, Texas 75235. An Equal Opportunity Employer.

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Fundamentals of Biotechnology

Fundamentals of Biotechnology

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Dr. Bruce H. Sells, Dean College of Biological Science University of Guelph Guelph, Ontario, Canada N1G 2W1

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CSEOL Fellows Committee Geology Building, Room 5687 University of California, Los Angeles Los Angeles, Calif. 90024 Telephone: 213-825-1170

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STATEMENT

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Statement required by the Act of 12 August 1970, Section 3685, Title 39, United States Code, showing the ownership, management, and circulation of:

1-6. Science is published weekly on Friday, except the last week in December, at 1333 H Street, NW, Washington, D.C. 20005. Date of filing: 23 October 1985. This is also the address of the publisher, the editor, and the managing editor, who are, respectively, William D. Carey, Daniel E. Koshland, Jr., and Patricia A. Morgan.

7. The owner is America A. Morgan.
7. The owner is American Association for the Advancement of Science, 1333 H Street, NW, Washington, D.C. 20005. Stockholders: None.
8. Known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities: None.

9. The purpose, function, and nonprofit status of this organization and the exempt status for federal income tax purposes have not changed during the preceding 12 months.

10. The average number of copies of each issue during the preceding 12 months is (A) Total number of copies printed: 166,463; (B) Paid circulation: (1) sales through dealers and carriers, street vendors, counter sales: None; (2) Mail subscriptions: 155,100; (C) Total paid circulation: 155,100; (D) Free distribution by mail corriers or other means complete. to lotal paid circulation: 153,100, (D) Fied institution by mail, carrier, or other means: samples, complimentary, and other free copies: 2,890; (E) Total distribution: 157,990; (F 1) Office use, leftover, unaccounted, spoiled after printing: 8,473; (F 2) Returns from news agents: None; (G) Total:

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